

OVERVIEW 2014

# NUNAVUT MINERAL EXPLORATION, MINING AND GEOSCIENCE



Canada

## TABLE OF CONTENTS

Land Tenure in Nunavut.....	3
Aboriginal Affairs and Northern Development Canada.....	4
Government of Nunavut .....	7
Nunavut Tunngavik Incorporated.....	12
Canada-Nunavut Geoscience Office .....	14
Summary of 2014 Exploration Activities .....	
Kitikmeot Region .....	18
Base Metals .....	20
Gold.....	22
Inactive Projects.....	29
Kivalliq Region .....	30
Base Metals .....	32
Diamonds .....	32
Gold.....	34
Uranium .....	41
Inactive Projects.....	46
Qikiqtani Region.....	48
Base Metals .....	50
Diamonds .....	51
Iron.....	54
Nickel-Copper-PGE .....	56
Inactive Projects.....	57
Glossary.....	58
Guide to Acronyms.....	60
Index .....	61

### ABOUT NUNAVUT: MINERAL EXPLORATION, MINING, AND GEOSCIENCE OVERVIEW 2014

This exploration overview is a combined effort of four partners: Aboriginal Affairs and Northern Development Canada (AANDC), Government of Nunavut (GN), Nunavut Tunngavik Incorporated (NTI), and Canada-Nunavut Geoscience Office (CNGO). The intent of this publication is to capture information on exploration and mining activities in 2014 and to make this information available to the public.

We thank the many contributors who submitted data and photos for this edition. Prospectors and mining companies are welcome to submit information on their programs for inclusion in next year's publication. Feedback and comments are appreciated.

### ACKNOWLEDGMENTS

The 2014 Exploration Overview was written by the Mineral Resources Division at AANDC's Nunavut Regional Office (Alia Bigio, Paul Budkewitsch, Andrea Markey and Katie Sheridan). Contributions were received from David Mate and colleagues at CNGO, Keith Morrison (NTI), and Linda Ham (GN), with cartography by Tat Ma (AANDC).

### NOTE TO READERS

This document has been prepared on the basis of information available at the time of writing. All resource and reserve figures quoted in this publication are derived from company news releases, websites, and technical reports filed with SEDAR ([www.sedar.com](http://www.sedar.com)). Readers are directed to individual company websites for details on the reporting standards used. The authors make no warranty of any kind with respect to the content and accept no liability, either incidental, consequential, financial or otherwise, arising from the use of this document.

All exploration information was gathered prior to December 2014. All projects with active status in this publication completed and reported on exploration work during 2013 or 2014. Inactive projects continue to have active mineral tenure but have not reported exploration work during 2013 or 2014.

With reference to the use of the term *National Instrument 43-101 (NI 43-101)*: this is an industry standard outlining rules and guidelines for reporting and disclosing scientific and technical information about mineral projects. This standard is supervised by the Canadian Securities Administrators.

*Cover photo: Helicopter slinging a bag of kimberlite material from the bulk sample at the Qilalugaq project in the Kivalliq Region – Courtesy of North Arrow Minerals*

For information regarding reproduction rights, please contact Public Works and Government Services Canada at: 613-996-6886 or at: [droitdauteur.copyright@tpsgc-pwgsc.gc.ca](mailto:droitdauteur.copyright@tpsgc-pwgsc.gc.ca)

[www.aandc.gc.ca](http://www.aandc.gc.ca)  
1-800-567-9604  
TTY only 1-866-553-0554

QS-Y395-000-EE-A1  
Catalogue: R71-39/2014E-PDF  
ISSN: 2292-7751

© Her Majesty the Queen in right of Canada,  
represented by the Minister of Aboriginal Affairs and  
Northern Development, 2015

This publication is also available in French under the title:  
*Nunavut Exploration minérale, exploitation minières et sciences de la terre, Aperçu 2014*



Innuitian Mountains, Ellesmere Island – Courtesy of AANDC

The territory of Nunavut was created in April 1999 as a result of the Nunavut Land Claims Agreement, the largest Aboriginal land settlement in Canadian history. Spanning two million square kilometres ( $\text{km}^2$ ), the territory has 25 communities and a population of almost 37,000. Inuit represent 85 per cent of the residents, creating the foundation of the territory's culture and values. This culture is inherently connected to the land, shaping government, business and day-to-day life.

In addition to the creation of the territory, the Nunavut Land Claims Agreement gave Inuit fee simple title to 356,000  $\text{km}^2$  of land. There are 944 parcels of Inuit Owned Lands (IOL) where Inuit hold surface title only (surface IOL). The Government of Canada or "the Crown" retains the mineral rights to these lands. Inuit also hold fee simple title, including mineral rights, to 150 parcels of IOL (subsurface IOL), which total 38,000  $\text{km}^2$  and represent approximately two per cent of the territory. Surface title to all IOL is held in each region by one of the three Regional Inuit Associations (RIAs) while title to subsurface IOL is held and administered by Nunavut Tunngavik Incorporated (NTI). NTI negotiates

Exploration Agreements and Mineral Production Leases on land where NTI owns the subsurface rights while the RIAs grant access and land use licences on all IOL.

On land where the Crown owns the mineral rights, Aboriginal Affairs and Northern Development Canada (AANDC) administers subsurface rights, issuing prospecting permits, recording claims and issuing mineral leases according to the *Nunavut Mining Regulations*. These regulations replaced the *Northwest Territories and Nunavut Mining Regulations* and came into effect April 1, 2014. Surface rights are administered according to the *Territorial Land Use Regulations*.

The Nunavut Land Claims Agreement is a final settlement whereby all land claims in Nunavut have been settled with the Inuit of Nunavut and therefore Nunavut has an unmatched level of land tenure certainty.

For more information on the location of IOL and Crown land in the territory, refer to the *Nunavut: Mineral Exploration, Mining and Geoscience Active Projects 2014 Map*.

#### MINERAL TENURE IN GOOD STANDING IN NUNAVUT Source: AANDC

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Permits	2,267	1,395	1,057	1,041	394	477	314	259	196	110
Claims	9,644	6,707	7,905	8,088	7,613	7,178	6,777	6,066	5,562	4,278
Leases	332	352	354	479	590	631	567	627	701	492

#### WHO IS DOING THE WORK? Source: Natural Resources Canada

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014*
Juniors (Millions \$)	132.5	161.8	237.4	261.4	56.9	125.0	163.0	129.0	115.4	67.2
Seniors (Millions \$)	46.2	48.8	100.6	171.2	130.7	131.7	372.6	293.5	154.8	99.3
Total	178.7	210.6	338.0	432.6	187.6	256.7	535.6	422.5	270.2	166.5

\*Spending intentions released March 2014

Aboriginal Affairs and Northern Development Canada (AANDC), in line with the Government of Canada's Northern Strategy, supports Northern Canadians in their efforts to improve social and economic well-being, to develop healthier, more sustainable communities and to participate more fully in Canada's political, social and economic development.

Representing two-fifths of Canada's land mass, the North has tremendous resource potential and Nunavut is a place of significant opportunity for Northerners and all Canadians. According to statistics released by Natural Resources Canada in March 2014, it is anticipated that \$166.5 million has been spent on exploration and deposit appraisal in Nunavut in 2014. Despite a reduction from last year's estimated investment of \$270.2 million, Nunavut is still fifth in Canada in terms of overall investment, after Ontario, British Columbia, Quebec, and Saskatchewan.

AANDC's mandate in Nunavut is far-reaching including resource, land and environmental management responsibilities. The department manages Crown land in the territory and issues authorizations for surface rights and subsurface rights. Based on 2014 statistics, approximately 76,602 km<sup>2</sup> of Crown land in Nunavut is covered by prospecting permits, mineral claims, coal licences, and mineral leases. This equals about 3.6% of Nunavut's land area. AANDC also inspects and enforces the terms and conditions of water licences issued by the Nunavut Water Board, land use permits issued by the department, and compliance with the governing federal acts. The department's environmental management responsibilities in Nunavut also include active participation in the co-management system determined by the Nunavut Land Claims Agreement and cleaning up contaminated sites. The department works with many partners to meet these responsibilities including other federal departments, the Government of Nunavut, Nunavut Tunngavik Incorporated and the Regional Inuit Associations, and the five institutions of public government: the Nunavut Planning Commission, the Nunavut Impact Review Board, the Nunavut Water Board, the Nunavut Surface Rights Tribunal, and the Nunavut Wildlife Management Board.

## DEVOLEUTION

In October 2014, the Minister of Aboriginal Affairs and Northern Development announced the appointment of a Chief Federal Negotiator to negotiate an Agreement-in-Principle for the devolution of lands and resources in Nunavut. With this appointment, the Government of Canada begins the formal negotiation process that will transfer province-like

responsibilities for land and resource management to the Government of Nunavut. Devolution is an important step in the political and economic development of Nunavut. Giving Nunavut greater control over its lands and resources ensures that northerners participate in realizing the economic potential of the region and that Nunavut remains an attractive place to live, work, and invest.

## REGULATORY IMPROVEMENTS

### **NUNAVUT WATERS AND NUNAVUT SURFACE RIGHTS TRIBUNAL ACT**

Proposed amendments to the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* were introduced in the Senate as Part of Bill S-6, the Yukon and Nunavut Regulatory Improvement Act on June 3, 2014. The proposed amendments would reduce the regulatory burden, ensure a timely and predictable water licence review process and implement more robust enforcement provisions to foster environmental stewardship. They will also align the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* with other federal environmental statutes. Specifically, some of the amendments will create a nine-month time limit for Type A water licence reviews, allow the Nunavut Water Board to issue life-of-project water licences, allow for security arrangements to address concerns over collection of securities, introduce cost recovery measures, increase fines, and establish an administrative monetary penalties regime.

## TERRITORIAL LAND USE REGULATIONS AND TERRITORIAL

### QUARRYING REGULATIONS

Other regulatory improvements in Nunavut include administrative amendments to the existing Territorial Land Use Regulations and Territorial Quarrying Regulations. The amendments will bring the regulations into step with current operating realities and make the process more efficient for industry and government. Some of the proposed amendments to the Territorial Land Use Regulations are increasing the duration of land use permits from two years up to five years, allowing more time for consultation on Class B land use permit applications, and updating the information requested for final reports to reflect current technology. Amendments to the Territorial Quarrying Regulations will increase the permit duration from one year to a maximum of three years and will include new definitions of terms and the metrification of Imperial units.

Stakeholder consultation through pre-publication in *Canada Gazette I* occurred for the Territorial Land Use Regulations and Territorial Quarrying Regulations between May 24, 2014 and June 23, 2014. The new regulations are expected to be in force in early 2015.

**NUNAVUT MINING REGULATIONS**

AANDC has completed the modernization of the mineral tenure provisions of the Northwest Territories and Nunavut Mining Regulations and created two new federal regulations: the Nunavut Mining Regulations and the Northwest Territories Mining Regulations. The coming into force of both these regulations coincided with NWT devolution on March 31, 2014.

The new Nunavut Mining Regulations will be amended to enable the replacement of ground staking in Nunavut with online map selection of mineral claims. Consultation through pre-publication in *Canada Gazette I* is anticipated in mid 2015 with the implementation of online map selection expected by March 2016.

**PARTNERSHIPS IN BASELINE DATA**

Within the Nunavut Regional Office, AANDC hosts the Nunavut General Monitoring Plan Secretariat. NGMP coordinates monitoring projects across the territory, identifies gaps where monitoring needs to take place, and through targeted investments funds research initiatives that complement or build on existing knowledge. NGMP provides reports to increase public access to ecosystemic and socio-economic information. The NGMP is a partnership mandated by the NLCA and overseen by a steering committee comprised of AANDC, on behalf of the Government of Canada, the Nunavut Planning Commission, the Government of Nunavut and Nunavut Tunngavik Incorporated.

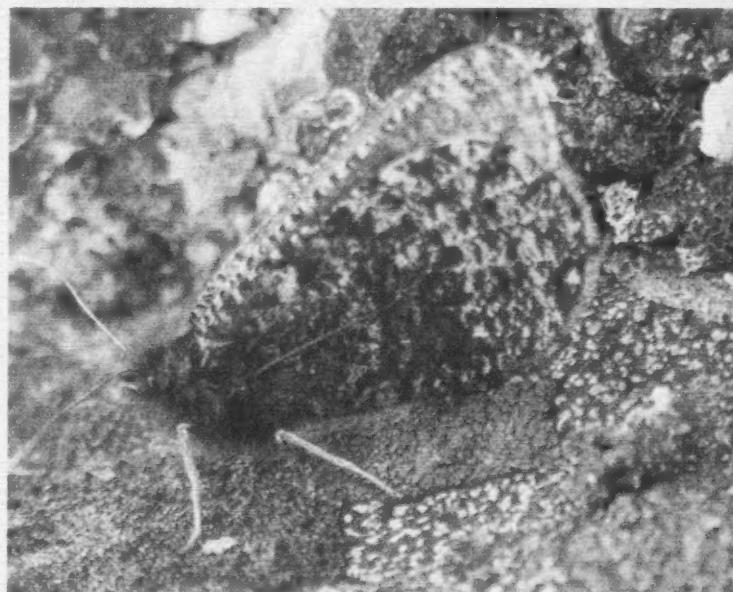
The Baker Lake Basin Cumulative Effects Monitoring Program, a watershed-based monitoring program for the Baker Lake Basin and one of the monitoring projects the NGMP has been funding, is a collaborative partnership between AANDC Water Resources, NGMP, and the Kivalliq Inuit Association with the end goal of creating a watershed management strategy. This strategy will be achieved through the development of a long-term monitoring program to identify cumulative effects and by determining how to mitigate the impacts as development increases in the region. A framework and preliminary program for regional watershed-based monitoring in the basin was developed in 2013. Phase 1 of the preliminary program focuses on start-up and operation of a monitoring program utilizing current knowledge from both western science and Inuit traditional knowledge (Inuit Qaujirmajatuqangit). The Baker Lake Basin Indicators Workshop, held in September 2014, included a variety of stakeholders from the Baker Lake area and focused on scientific aspects of the monitoring program. Consideration of the role of Inuit traditional knowledge

in the aquatic monitoring program will be addressed through a subsequent workshop over the next year.

**NUNAVUT REGIONAL OFFICE BY THE NUMBERS**

The following activities were carried out by AANDC's Nunavut Regional Office in 2014:

- 13 prospecting permits were issued, bringing the total number of existing prospecting permits in the territory to 110.
- 167 mineral claims (as of November 1, 2014) were recorded. No new mineral leases or coal licenses were issued.
- 22 land use permits were issued and 20 extensions granted, bringing the current number of active land use permits to 173. There were also 19 quarry permits issued this year.
- Provided detailed expertise and technical review comments to the Nunavut Impact Review Board for environmental assessments of five major project proposals and 39 smaller proposals, as well as reviewing three annual monitoring reports.
- Provided technical advice to the Nunavut Water Board in the assessment of more than 84 water licence applications, amendments, and renewals.
- Inspected 295 land and water authorizations associated with exploration camps, mines, and research camps as well as twenty municipal water licences. Completed quarterly inspections of Baffinland's Mary River iron ore project.



Melissa arctic (*Oeneis melissa*) butterfly, Hall Peninsula  
—Courtesy of AANDC

**NUNAVUT REGIONAL OFFICE**

PO Box 2200, Iqaluit, NU X0A 0H0  
t: 867 975 4500 • f: 867 975 4276

**RESOURCE MANAGEMENT DIRECTORATE**

Karen Costello, Director  
t: 867 975 4546 • e: karen.costello@aandc.gc.ca

Manager, Water Resources (*vacant*)

t: 867 975 4550 • e: nunavutwaters@aandc.gc.ca

James Neary, Manager, Impact Assessment

t: 867 975 4549 • e: nunavutenvironment@aandc.gc.ca

**MINERAL RESOURCES**

e: nunavutminerals@aandc.gc.ca

Matthew Senkow, Manager, Mineral Resources

t: 867 975 4290

Paul Budkewitsch, District Geologist

t: 867 975 4292

Katie Sheridan, District Geologist

t: 867 975 4291

**ASSESSMENT REPORT ARCHIVES**

t: 867 975 4293 • f: 867 975 4276  
e: nunavutarchives@aandc.gc.ca

**LANDS AND CONTAMINATED SITES DIRECTORATE**

e: landsmining@aandc.gc.ca

Tracey McCaie, Manager, Land Administration

t: 867 975 4280

Becky Leighfield, Mining Recorder

t: 867 975 4281 • f: 867 975 4286

**FIELD OPERATIONS (INSPECTIONS, COMPLIANCE  
AND ENFORCEMENT)**

Erik Allain, Manager

t: 867 975 4295 • e: erik.allain@aandc.gc.ca

**NUNAVUT GENERAL MONITORING PLAN**

t: 1-855-897-6988

e: ngmp.psgn@aandc-aadnc.gc.ca

[www.ngmp.ca](http://www.ngmp.ca)

**WEBSITE**

[www.aandc-aadnc.gc.ca/nu](http://www.aandc-aadnc.gc.ca/nu)

Raised beaches near Cambridge Bay, Victoria Island – Courtesy of AANDC



Shoreline of Repulse Bay – Courtesy of North Arrow Minerals



The Government of Nunavut (GN) committed to “Economic growth through responsible development across all sectors” in the recently released mandate *Sivumut Abluqta: Stepping Forward Together (2014-2018)*.

This vision is shared between many partners, including the mineral resource industry. Within the GN, the Minerals and Petroleum Resources Division (MPR), a division of the Department of Economic Development and Transportation (EDT), is committed to building and supporting a territory-wide strong and diversified mining and exploration industry, based on best practices of sustainable development and partnerships. MPR oversees resource management, socio-economic monitoring, and works with the mineral industry. The Departments of Environment and EDT lead the GN’s participation in environmental reviews through interdepartmental working groups focused on both environmental and socio-economic impacts.

With one mine in Nunavut well into its operating life (Meadowbank gold mine), a second mine recently opened (Mary River iron ore mine), a number of advanced development projects, and numerous discoveries, there are many resource-related opportunities on Nunavut’s horizon.

The GN is working to ensure that all Nunavummiut are in a position to benefit from these opportunities and is committed to ensuring that residents have opportunities to be full participants in future development.

EDT has regional offices in Kugluktuk, Rankin Inlet, Pond Inlet, and Pangnirtung. MPR has its headquarters in Iqaluit, with regional offices in Arviat and Cambridge Bay. MPR works in six major areas: (1) geoscience, (2) resource management, (3) prospector development, (4) community education and awareness, (5) investor confidence, and (6) development partnership agreements management.

#### GEOSCIENCE

The GN remains strongly committed to public geoscience as a means of encouraging new exploration opportunities. EDT with Aboriginal Affairs and Northern Development Canada (AANDC) and Natural Resources Canada provides core funding to the Canada-Nunavut Geoscience Office (CNGO) and EDT provides program support for the CNGO’s territorial mapping and research projects. One of the programs recently undertaken that involved EDT collaborative work with the CNGO was the Nunavut Carving Stone Resource Evaluation Program.



Feldspar in pegmatite outcrop, Hall peninsula  
— Courtesy of GN

#### CARVING STONE DEPOSIT EVALUATION PROGRAM

The Nunavut Carving Stone Deposit Evaluation Program (2010-2014) is a collaborative project between EDT geological and technical staff and the CNGO, and is funded by the Canadian Northern Economic Development Agency and EDT. The objectives of this territory-wide project were to locate and evaluate known and new carving stone deposits and assess their artisanal suitability and potential to supply nearby communities. Data collected will be distributed via an interactive web database. Site materials have also been collected for archival, analytical and exhibition purposes.

During this multi-year program, a total of 94 carving stone resource sites were evaluated; these sites are located near communities in all three regions. Results indicate that 17 out of Nunavut's 25 communities have access to adequate local carving stone resources. Overall, there are 11 quarries and 15 additional undeveloped deposits with sufficient stone to provide several decades of carving stone to the nearest community. Eight communities (Resolute, Coral Harbour,

Qikiqtarjuaq, Arviat, Chesterfield Inlet, Grise Fiord, Repulse Bay, and Whale Cove) remain impoverished for carving stone resources.

Carving stone in Nunavut is largely supplied from two well-established quarries, both in operation since the 1970s. Cape Dorset's Korok Inlet quarry is the premier producer of carving stone for the south Baffin region, supplying the communities of Cape Dorset, Kimmirut and Iqaluit with 450 tonnes per year of excellent-quality artisan serpentinite. The Main quarry in the Belcher Islands has supplied Sanikiluaq carvers with 50 tonnes per year of excellent-quality artisan marble. Previously undocumented reserves at this Main quarry are now estimated at 30,000 tonnes, twice as large as Korok Inlet's total output. Four artisan serpentinite resources of similar large size have been confirmed elsewhere; three occur in the Qikiqtani region and a fourth in the northern Kivalliq region.

MPR is reporting results from the Carving Stone Deposit Evaluation program to local economic development officers, Nunavut communities, the Nunavut Arts and Crafts Association, Regional Inuit Organizations, and government and scientific agencies.

#### RESOURCE MANAGEMENT:

##### MINERAL EXPLORATION AND MINING STRATEGY

The goal of *Parnautit: The Nunavut Mineral Exploration & Mining Strategy* is: "To create the conditions for a strong and sustainable minerals industry that contributes to a high and sustainable quality of life for all Nunavummiut." *Parnautit*, released in 2007, remains the GN's framework of policies and actions to encourage mineral discovery and development in Nunavut. The four pillars of the strategy address: (1) regulatory and taxation regimes, (2) workforce training, (3) infrastructure development, and (4) environmental baseline data availability.

##### IMPACT ASSESSMENT AND MONITORING

The GN, through the Departments of Environment and EDT, participates in the environmental assessment review of resource development through the Environmental Assessment Review Team. The GN strives to ensure any resource development in Nunavut represents a net benefit to all. The primary purpose of the review team is to ensure all resource development projects reflect the priorities of the GN.

The team's work is carried out by two committees: the Environmental and Human Health Assessment Committee and the Socio-Economic Assessment Committee.

committee reviews environmental impact statements submitted to the Nunavut Impact Review Board and actively participates in technical meetings, hearings, and regulatory workshops. Both committees are coordinated by the Avatiliriniq (Environmental) Coordinator.

EDT is the lead of the Socio-Economic Assessment Committee and as such is responsible for coordinating the participation of GN departments and other agencies with a mandate directly linked to the social, economic, and cultural well-being of Nunavummiut.

The Department of Environment is the lead for the Environmental and Human Health Assessment Committee and as such coordinates the participation of GN departments and other agencies responsible for wildlife, environmental protection, and human health.

EDT is also the GN's lead on the three Regional Socio-Economic Monitoring Committees. These committees were established to ensure consistency across the territory and to implement regional project-specific monitoring programs.

These programs address project certificate requirements for resource development projects and provide a venue for stakeholders to take part in monitoring efforts.

#### URANIUM POLICY STATEMENT

The GN's *Uranium Policy Statement* was released in 2012 (see the document in full at [www.uranium.gov.nu.ca](http://www.uranium.gov.nu.ca)). In brief, the GN supports safe and responsible development of uranium that provides substantive and sustainable benefits to Nunavut without harming the environment. Additionally, uranium mined in Nunavut shall be used only for peaceful and environmentally responsible purposes. Nunavummiut must be the major beneficiaries of uranium exploration and mining activities.

The GN also recognizes the jurisdictions of the Nunavut Impact Review Board and the Nunavut Water Board as established by the Nunavut Land Claims Agreement in the regulation of uranium exploration and mining. It is recognized that uranium is subject to international agreements and national laws and the GN supports the mandate and responsibilities of the Canadian Nuclear Safety Commission.



Hamlet of Baker Lake – Courtesy of AANDC



GN prospecting course students learning how to pan for gold near Whale Cove.

*- Courtesy of GN (with permission from Jordan Okalik)*

#### PETROLEUM RESOURCES

The GN supports investment in Nunavut's petroleum resources and is committed to responsible economic development. Petroleum exploration in Nunavut began in 1962 and occurred throughout the territory until 1986. Nunavut is estimated to hold approximately a third of Canada's total petroleum resource endowment. Discovered resources in Nunavut are held in 20 licensed fields, mostly in the Sverdrup Basin in the High Arctic, and are estimated to be nearly 2 billion barrels of crude oil and 27 trillion cubic feet of natural gas.

AANDC is conducting environmental and consultation work for a Strategic Environmental Assessment of Baffin Bay and Davis Strait. The GN supports the Government of Canada's initiative and is involved in this work.

#### PROSPECTOR DEVELOPMENT

MPR oversees the Nunavut Prospectors Program. This program has two parts, the introductory prospecting courses and the funding program.

MPR geologists annually present an Introduction to Prospecting Course to interested residents in communities across the territory. Since 2000, the course has been offered in each community in Nunavut once every three or four years. To date, more than 900 Nunavummiut have successfully completed the course. In 2014, courses were held in Cambridge Bay, Gjoa Haven, Chesterfield Inlet,

Coral Harbour, Repulse Bay, Whale Cove, Hall Beach and Sanikiluaq and 75 people received certificates.

Many graduates have subsequently applied to the funding program to start their own prospecting ventures. Financial assistance is provided to Nunavummiut with demonstrated prospecting skills who want to carry out their own work. The program allows for up to \$8,000 in annual financial assistance for each qualified prospector. There are typically 15 to 20 individual prospector's projects funded annually through this program operating throughout Nunavut.

#### MINERALS EDUCATION AND TRAINING

EDT works with other stakeholders, including the GN Department of Education, the Government of Canada, and the mining and exploration industry on a number of programs and initiatives designed to inform Nunavummiut of the opportunities in mineral resources. These programs and initiatives include:

#### NUNAVUT MINE TRAINING ROUNDTABLE:

EDT contributes \$200,000 a year for multi-party mine training programs. 2014-2015 funds were allocated for training potential workers in the Qikiqtani and Kivalliq regions, through four programs:

- Mining Rocks and Light-Vehicle Training (Baffinland Iron Mines Corporation);
- Diamond Driller's Helper Training Program, Introduction to Welder Training, Work Readiness Program, and Class 3/Airbrake Training (Hamlet of Arviat);

- Facilitator Training Workshop for Rotational Work (Kivalliq Mine Training Society); and
- Dalhousie University-CNGO Field Training Program.

#### **NUNAVUT LABOUR FORCE STUDY:**

EDT is conducting a study, similar to one completed in the Yukon, with the NWT Mine Training Society and the Mining Industry Human Resources Council for Yukon to produce a Pan-Territorial Mining Labour Market Forecast and Report. Completion of this report is expected early in 2015.

#### **EDT PROGRAMS AND INITIATIVES:**

- Nunavut High School Math and Science Awards Program;
- Independent Science Program for Youth (I-SPY) to support science-education camps and activities throughout Nunavut;
- Mineral Exploration Field Assistant's Course offered by Nunavut Arctic College;
- curriculum development for Nunavut schools; and
- school and community presentations about careers in mining.

#### **DEPARTMENT OF ECONOMIC DEVELOPMENT AND TRANSPORTATION, MINERALS & PETROLEUM RESOURCES DIVISION**

##### **HEADQUARTERS (IQALUIT)**

Linda Ham, Acting Director  
t: 867 975 7892 • e: lham@gov.nu.ca

Avery Henderson, Acting Manager, MPR  
t: 867 975 7842 • ahenderson@gov.nu.ca

Dianne Lapierre, Manager (*on leave*)  
Environmental Assessment & Regulations  
t: 867 975 7803 • e: dlapierre1@gov.nu.ca

Lou Kamermans, Acting Manager,  
Environmental Assessment  
t: 867 975 7806 • e: lkamermans@gov.nu.ca

Clayton Lloyd, Regional Socio-Economic Coordinator  
t: 867 975 7839 • e: clloyd1@gov.nu.ca

Agnes Simonfalvy, Avatilirinirq (Environmental) Coordinator  
t: 867 975 7830 • e: asimonfalvy@gov.nu.ca

**ARVIAT OFFICE**  
e: arviatresidentgeologist@gov.nu.ca

#### **DEVELOPMENT PARTNERSHIP AGREEMENT MANAGEMENT**

The Development Partnership Agreement Policy was introduced by the GN in 2006 as a means of collaborating with industry to identify and improve long-term social and economic benefits to Nunavummiut. Revised in 2012, the policy encourages mining companies to: (1) work with the GN and affected communities to determine what opportunities exist to mitigate any development impacts and (2) ensure continued benefits for future generations. Some of these opportunities include infrastructure development, education, and training.

The GN currently has one Development Partnership Agreement in place with Agnico Eagle Mines Limited, owner and operator of the Meadowbank gold mine near Baker Lake. As part of the agreement, Agnico Eagle has assisted the Hamlet of Baker Lake with construction of a new baseball diamond, with removal of toxic waste from its landfill, and with a variety of training initiatives for residents seeking employment at the mine.

Mike Beauregard, Resident Geologist  
t: 867 857 3165 • e: mbeauregard@gov.nu.ca

Hugh Nateela, Community Mining Advisor  
t: 867 857 3164 • e: hnateela@gov.nu.ca

Ronald Suluk, Manager, Community Mining Engagement  
t: 867 857 3166 • e: rsuluk@gov.nu.ca

**CAMBRAIGE BAY OFFICE**  
e: cambayresidentgeologist@gov.nu.ca

Hugh MacIsaac, Resident Geologist  
t: 867 983 4224 • e: hmacisaac@gov.nu.ca

Harry Maksagak, Community Mining Advisor  
t: 867 983 4160 • e: hmaksagak@gov.nu.ca

#### **DEPARTMENT OF ENVIRONMENT**

Conor Mallory, Acting Manager, Land Use and Environmental Assessment  
t: 867 975 7749 • e: cmallory1@gov.nu.ca

Denise Baikie, Project Manager, Impact Assessment  
t: 867 975 7731 • e: dbaikie@gov.nu.ca

[www.gov.nu.ca](http://www.gov.nu.ca)



Nunavut Tunngavik Incorporated (NTI) is the Inuit corporation responsible for overseeing the implementation of the Nunavut Land Claims Agreement. NTI's mandate includes safeguarding, administering and advancing the rights and benefits of the Inuit of Nunavut

to promote their economic, social, and cultural well-being through succeeding generations. The Lands and Resources Department of NTI, in cooperation with the three Regional Inuit Associations (RIAs) who are the surface owners of the Inuit Owned Lands (IOL) parcels, is responsible for the implementation of Inuit responsibilities related to the management of IOL, minerals, oil and gas, and marine areas.

NTI is the manager of the minerals for which the Inuit are the fee simple title owners. For these minerals, NTI issues mineral rights through a negotiated Exploration Agreement (EA) that provides a holder the right, if it meets the terms of the EA, to receive a Mineral Production Lease that allows for mining a discovered resource.

NTI uses a map selection system for the acquisition of mineral rights. Interested parties submit to NTI an Expression of Interest which includes a map of the proposed exploration area. Expressions of Interest and subsequent correspondence and negotiation are kept confidential by NTI and the applicable RIA until required to be made public, typically upon signing of a Memorandum of Understanding between NTI and the applicant. The Memorandum of

Understanding outlines the agreed terms upon which the EA will be developed.

Although the process described above normally applies, NTI, as a private organization, has complete discretion as to whether it will issue an EA (or other agreement), what the process will be to obtain an agreement, and what the terms of the agreement will be. The terms may include, for example, NTI holding a direct interest in a project or seeking additional benefits such as shares or milestone payments.

Under the standard terms, successful applicants, upon executing the new EA and submitting the first year's annual fees, will be granted the exclusive right to explore for minerals throughout the exploration area. In order to gain access to the land, however, the applicant must first obtain a surface right such as a land use license issued by the RIA.

Holders of EAs are required to submit annual exploration work reports to NTI that remain confidential for a period of up to three years.

### NTI URANIUM, MINING AND RECLAMATION POLICIES

NTI has developed a series of policies applicable to exploration and mining, specifically a general Mining Policy, a Uranium Policy, and a Reclamation Policy. The policies provide that NTI will support exploration and mining provided: there are minimal negative environmental and socioeconomic impacts; that Inuit cultural and social needs are respected; that investment in Nunavut is encouraged;



Arctic Bay – Courtesy of AANDC

that land-use conflicts are resolved equitably; and that Inuit economic opportunities are maximized. The texts of all the policies are available from NTI.

#### PROJECTS ON INUIT OWNED LANDS

Many of the advanced exploration projects in Nunavut fall on IOL parcels for which NTI is the mineral title owner. The adjacent table summarizes some of the current active EAs and their locations.

Grandfathered leases are leases which were established on Crown land that then became IOL after the territory of Nunavut was created; the leases continue to be managed by the Crown, although the leases' rental fees are paid to NTI.

PROJECT/DEPOSIT	HOLDER(S)
<b>Kitikmeot Region</b>	
High Lake <sup>1</sup>	MMG Limited
Hope Bay <sup>2</sup>	TMAC Resources Inc.
Hood River	Inukshuk Exploration, WPC Resources Ltd.
<b>Kivalliq Region</b>	
Angilik/Lac Cinquante	Kivalliq Energy Corporation
Amaruk	Agnico Eagle Mines Ltd.
Meadowbank <sup>3</sup>	Agnico Eagle Mines Ltd.
Meliadine <sup>4</sup>	Agnico Eagle Mines Ltd.
North Thelon Project/ Ukalik	Forum Uranium Corp.
<b>Qikiqtani Region</b>	
Baffin Island Gold Project <sup>5</sup>	Commander Resources Ltd.
Haig Inlet and SQ-05	Canadian Orebodies Inc.
Mary River/Eqe Bay <sup>6</sup>	Baffinland Iron Mines Corporation

Note: All projects referenced above are discussed in this publication.

1. The project involves Crown land and land held under NTI EAs and grandfathered leases.
2. The Boston deposit is located on surface IOL, while the Doris, Madrid, South Patch, Naartok, and Suluk deposits are on subsurface IOL, distributed among grandfathered leases and NTI EAs. Potential extension of the Boston deposit down-dip or along strike to the north will also be on subsurface IOL.
3. The project involves land held under NTI EAs, grandfathered leases, and the Vault Mineral Production Lease issued by NTI.



Goose pit, Meadowbank gold mine – Courtesy of AANDC

4. The project involves land held under NTI EAs as well as grandfathered claims and leases.
5. The overall project involves Crown land and subsurface IOL.
6. The Mary River mine is located on a grandfathered lease. Additional showings and deposits in the area are located on a mixture of subsurface IOL and Crown land.

#### NTI LANDS, MINERALS, OIL AND GAS

PO Box 1269  
Cambridge Bay, NU X0B 0C0  
t: 867 983 5600  
f: 867 983 5624

Carson Gillis, Director of Lands and Resources  
e: cgillis@ntilands.com

Keith Morrison, Senior Advisor  
Minerals, Oil and Gas  
e: kmorrison@ntilands.com

Jordan Aitaok, Manager  
Mineral Agreements and Promotion  
e: jaitaok@ntilands.com

[www.ntilands.tunngavik.com](http://www.ntilands.tunngavik.com)



The Canada–Nunavut Geoscience Office (CNGO) was established in 1999 to help foster the development of Nunavut's mineral and energy resources and infrastructure. It is managed as a partnership between the Government of Nunavut (GN), Natural Resources Canada and Aboriginal Affairs and Northern Development Canada (AANDC). Nunavut Tunngavik Incorporated (NTI) is an ex-officio member of CNGO's management board. The office consists of six employees with expertise in Precambrian, Paleozoic and Quaternary geology; GIS; and online geoscience data dissemination.

The mandate of CNGO is to provide accessible geoscience information and expertise in Nunavut that supports responsible resource exploration and development and responsible infrastructure development. CNGO is also involved in geoscience capacity building, education and training, and geoscience awareness and outreach.

CNGO concentrates on new geoscience mapping and research, supporting capacity building, disseminating geoscience information, and developing collaborative partnerships of strategic importance to Nunavut.

In 2014, CNGO began a new two-year geoscience program with activities focused under three key themes. They include: geoscience for responsible natural resource development; geoscience for protecting investments in infrastructure; and geoscience data dissemination. On the education and outreach front, a second successful year of the northern geoscience training program between CNGO and Dalhousie University was completed. Summaries of each of the projects are provided below; more detailed papers with preliminary observations and interpretations will be published in the *Summary of Activities 2014* volume that will be available for download at [www.cngo.ca](http://www.cngo.ca) in January 2015.

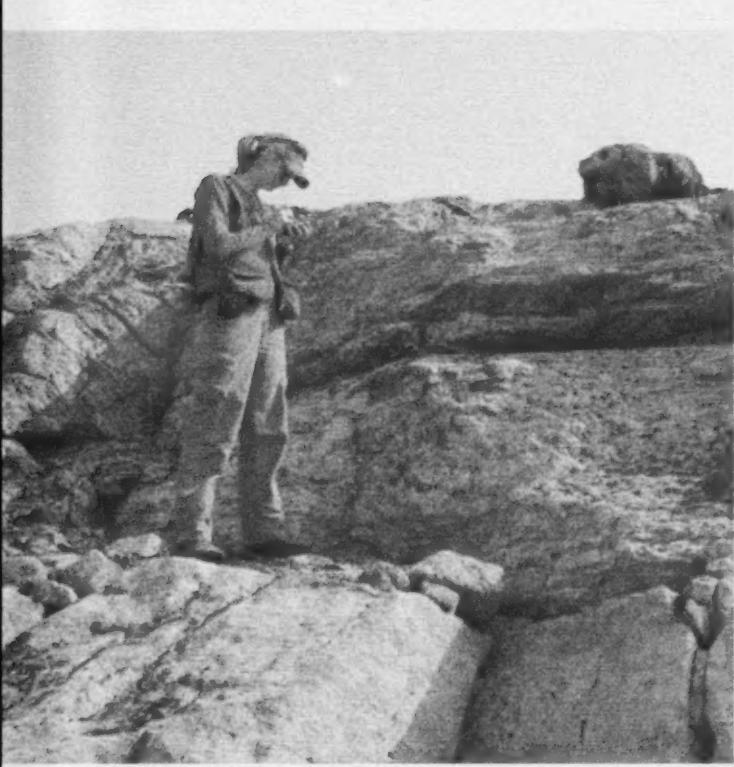
### GEOSCIENCE FOR RESPONSIBLE NATURAL RESOURCE DEVELOPMENT

#### TARGETED BEDROCK MAPPING ON SOUTHERN BAFFIN ISLAND

Detailed bedrock mapping and thematic studies conducted by CNGO on Hall Peninsula have led to the identification of new mineral showings. Many of these new discoveries are poorly understood and much of the region around Hall Peninsula lacks baseline geoscience information required to inform land-use and exploration decision-making. To build on the success of the Hall Peninsula project and expand the geoscience and mineral resource knowledge across southern Baffin Island, CNGO is conducting targeted mapping and sampling on newly discovered mineral showings on Hall Peninsula, identifying and documenting new mineral occurrences north of Iqaluit towards Nettilling Lake and on Meta Incognita Peninsula, and acquiring new aeromagnetic data for a large area north of Hall Peninsula. This work will increase the level of geoscience knowledge in an otherwise frontier region of Nunavut.

#### TARGETED BEDROCK MAPPING IN THE ELU BASIN OF WESTERN NUNAVUT

The Canadian Shield hosts a suite of superimposed intracratonic basins with demonstrated uranium and lead-zinc mineral potential. These include the Paleo- to Meso-Proterozoic Thelon and Baker Lake basins in the Kivalliq region and the Meso-Proterozoic Bylot Basin on northern Baffin Island. Other basins, such as the Elu Basin in the western part of Nunavut, are still poorly understood and could contain similar mineral potential, as they are thought to represent the northern extension of the prolific Athabasca Basin of Saskatchewan. The objective of this targeted bedrock mapping project is to enhance the level of geoscience knowledge in the Elu Basin in order to support mineral exploration. Currently, the economic potential of the Elu Basin is uncertain, with metallogenetic assessments conducted only at isolated prospects. The most recent mapping in the basin dates back to the 1970s and previous



Geologist taking field notes, Meta Incognita Peninsula  
— Courtesy of CNGO



Cirques and fjord, Hall Peninsula – Courtesy of AANDC

prospecting was performed mostly at scattered drilling sites. The current work includes acquiring new data on the depositional architecture of the basin, prospective bedrock units, and the style of mineralization.

#### **PALEOZOIC STRATIGRAPHY AND PETROLEUM POTENTIAL STUDIES FOR BAFFIN BAY**

Baffin Bay has long been thought to possess petroleum potential. A recent discovery by CNGO of an organic-rich black shale preserved as a xenolith, or rock fragment, in a kimberlite pipe on Hall Peninsula provides the first evidence of Paleozoic-age petroleum source rocks in the region. New work will be conducted to try and identify additional black shale xenoliths from kimberlite pipes on Hall Peninsula in order to understand their distribution, stratigraphic position, age, and petroleum potential.

#### **INDUSTRIAL LIMESTONE RESOURCES ON SOUTHAMPTON ISLAND**

Since 2009, CNGO has been exploring for high-calcium limestone on Southampton Island. There is growing demand from the mining industry in the Kivalliq region for industrial products of high-calcium limestone, namely quicklime and hydrated lime. In 2013, a prospective interval of the Lower Silurian Ekwan River Formation was discovered at one location along an eroded creek bed on southwestern Southampton Island. In order to better understand the

potential of this resource in the area, additional exposures in creeks to the south of the initial discovery were studied during the summer of 2014. This ongoing work will help determine the stratigraphic position and geographic distribution of high-calcium limestone in the area, provide an assessment of its purity based on detailed geochemical data, and identify potential quarry locations.

#### **NEW CARVING STONE RESOURCE ASSESSMENTS**

Carving stone is an important mineral commodity in Nunavut. The objective of this work is to undertake detailed mapping and resource evaluations at new carving stone prospects found on Hall Peninsula as well as large artisan grade deposits at Opingivik (Cumberland Sound), Mary River, and on Melville Peninsula. This work will help identify any new deposits that could become significant new sources of carving stone in the future for Inuit carvers and the Nunavut arts and crafts industry.

#### **EXPLORATION TARGETING USING HIGH RESOLUTION SATELLITE DATA**

Nunavut makes up 20 per cent of Canada's land mass and hosts some of the most prospective mineral exploration ground in the world. Short seasonal access, high operational costs, and sparse geoscience data coverage, however, are large deterrents to advancing many projects. The purpose of this work is to assess the effectiveness of new, high resolution

satellite data sets for identifying nickel, base metal, copper, and gold occurrences at key test sites across Nunavut. This work could help exploration companies both reduce costs and provide a means to focus on the most promising areas of interest. Results will illustrate the costs and benefits of using new, more advanced remote sensing technologies to assist with targeting exploration work in the territory.

### GEOSCIENCE FOR PROTECTING INVESTMENTS IN INFRASTRUCTURE SEABED MAPPING OF FROBISHER BAY TO SUPPORT INFRASTRUCTURE DEVELOPMENT

Frobisher Bay is becoming a focal point for a range of new infrastructure developments to support Nunavut's capital city as well as natural resource development. Some of the exploration and development work in the region includes the Chidliak diamond property, potential hydro-electric development at Jaynes Inlet and Arnshew River South, a proposed fibre-optic data cable, and the construction of a new deep water port. New marine geoscience information will be required in order to plan for and support this development. CNGO, the GN's Nuliajuk research vessel, and Natural Resources Canada are collaborating to map the seabed of Frobisher Bay. The main objective is to provide key geoscience data that will help define risks to infrastructure development in Frobisher Bay and the corresponding solutions that will be required to build and maintain it.

Multibeam sonar technology is being used to characterize the seabed and assess it for geohazards. Issues such as near-shore ice, tidal currents, iceberg scour, submarine landslides, natural gas or petroleum seeps, wave exposure, and coastal stability will be better understood in order to help maintain existing facilities, construct new infrastructure, and determine the viability of channel approaches.

### IQALUIT INTERNATIONAL AIRPORT PERMAFROST-INFRASTRUCTURE ANALYSIS

The Iqaluit International Airport is a critical piece of infrastructure. This facility is essential for supporting the well-being of communities across the eastern Canadian Arctic and for the development of mineral resources in the region. To support informed decision-making and infrastructure investment, a multi-disciplinary approach is proposed to study terrain hazards and permafrost sensitivity to warming at the airport. Previous work has focused on geomorphological, geophysical, and satellite-based characterization of the permafrost terrain and ground stability at and around the airport. New work will focus on innovative thermal modelling and geophysical imaging of permafrost processes under airport infrastructure in response to both environmental and anthropogenic variables. Study results will be used to evaluate the stability of infrastructure, permafrost evolution, and the risks to infrastructure associated with projected climate scenarios.



Geologists examining rock samples at an outcrop, Meta Incognita Peninsula – Courtesy of CNGO



Field assistant sampling, Hall Peninsula – Courtesy of CNGO

#### **GEOSCIENCE TO SUPPORT WESTERN HUDSON BAY**

##### **INFRASTRUCTURE DEVELOPMENT**

Significant new infrastructure development is being considered in order to support the natural resource sector and communities in the western Hudson Bay region. The objective of this activity is to compile all existing aggregate, mineral potential, surficial and permafrost data in a corridor approximately 50 km wide extending from the Manitoba border to Rankin Inlet along the western Hudson Bay coast. A compilation of the geoscience knowledge in this corridor will address a significant knowledge gap. It is expected that the data compiled and knowledge generated through this work will help direct future applied geoscience research in the area.

#### **GEOSCIENCE DATA DISSEMINATION**

One of the key ingredients of a successful mining jurisdiction is the availability of public geoscience information. Industry, governments and the public require well managed and easily accessible data to make better decisions. New work with the objective of making new Nunavut geoscience data available online will address the updating of Nunavut's mineral showings database. It will involve extracting and compiling new mineral showings information from more

than 200 recent industry assessment reports. The updated showings information will be available online through websites maintained by CNGO.

#### **EDUCATION AND OUTREACH**

In 2014, CNGO and Dalhousie University continued with its collaborative geoscience training program for Nunavut students, which provides intensive hands-on experience for Northerners that could lead them to exciting careers in the public or private sectors. The program is comprised of two components: a spring geological field school with Dalhousie University and summer work experience with CNGO. This annual program began in 2013 and has already provided training opportunities for five beneficiaries of the Nunavut Land Claims Agreement and has included student participation from the Yukon.

#### **CANADA-NUNAVUT GEOSCIENCE OFFICE**

1106 Ikaluktutiak Drive, 1st Floor  
PO Box 2319  
Iqaluit, NU X0A 0HO  
t: 867 975 4412

##### **Chief Geologist (*vacant*)**

Serge Basso, Geotechnology Analyst  
t: 867 975 4529  
e: serge.basso@nrcan-rncan.gc.ca

Celine Gilbert, GIS Specialist  
t: 867 975 4414  
e: celine.gilbert@nrcan-rncan.gc.ca

Holly Steenkamp, Bedrock Geology  
t: 867 975 4533  
e: holly.steenkamp@nrcan-rncan.gc.ca

Tommy Tremblay, Surficial Geology  
t: 867 975 4505  
e: tommy.tremblay@nrcan-rncan.gc.ca

Dr. Shunxin Zhang, Paleozoic Geology  
t: 867 975 4579  
e: shunxin.zhang@nrcan-rncan.gc.ca

[www.cngo.ca](http://www.cngo.ca)

#### **NUNAVUT GEOSCIENCE DATA**

[www.nunavutgeoscience.ca](http://www.nunavutgeoscience.ca)

## KITIKMEOT REGION

The Kitikmeot region is the second largest administrative district in Nunavut and occupies an area of 446,728 square kilometres ( $\text{km}^2$ ) which includes the western and northern portions of the Nunavut mainland as well as King William Island, Stefansson Island, and portions of Prince of Wales Island and Victoria Island. Cambridge Bay and Kugluktuk are the largest communities in the region and along with Yellowknife in the Northwest Territories provide logistical support, supplies, and services for exploration projects. The other communities, Gjoa Haven, Taloyoak and Kugaaruk, are located in the eastern part of the region.

The Kitikmeot region is underlain by Archean and Proterozoic-age rocks of several geological provinces, including the Bear, Churchill, and Slave, within the Canadian Shield. Paleozoic-age strata of the Arctic Platform underlie the northern part of the region. The major commodities of interest include gold, zinc, and copper, but the region is also known to host diamonds, platinum group elements, and uranium. Past-producing mines in the Kitikmeot region include the Lupin gold mine and Jericho diamond mine, both located southeast of Kugluktuk, and the Roberts Bay and Ida Bay silver mines, southwest of Cambridge Bay near the Hope Bay gold project.

Nearly 1.2 million hectares (ha) of active land tenure is held in the Kitikmeot region as mineral claims, prospecting permits, and mineral leases on Crown and IOL land. Exploration activity in the region during 2014 focused primarily on gold. Work was completed mainly by mid-tier and major companies on well-established projects as many junior companies were still coping with low metal prices and challenges related to financing projects. Encouraging news for developing projects was the recent success of the cargo vessel MV Nunavik in navigating the Northwest Passage unaided.

Sabina Gold and Silver Corp. continued work at its Back River gold project, focusing on a feasibility study that is expected to be released in early 2015. Sabina also released an updated mineral resource estimate in spring 2014, adding 735,000 ounces of gold in the measured and indicated resource categories and 48,000 ounces to the inferred resource category.

TMAC Resources Inc., which acquired the Hope Bay gold project from Newmont Mining Corp. in early 2013, conducted an exploration program from May to November 2014 to upgrade the NI 43-101-compliant mineral resource for the Doris gold deposit. It also re-opened existing mine site infrastructure to support future exploration.



Geologist recording field observations – Courtesy of AANDC

Mandalay Resources Corp. completed the acquisition of Elgin Mining Ltd. and its Lupin and Ulu gold projects. Ulu also experienced renewed interest through gold exploration company WPC Resources Inc., which is working towards an 80 per cent stake in the project, with completion of its 2014 field program on both Ulu and its adjacent 100 per cent owned Hood River property.

Exploration for base metals in the Kitikmeot region was minimal during the 2014 season, in part due to market conditions. Some companies are re-evaluating priorities and seeking joint ventures to continue work. There has, nevertheless, been an increase in active mineral tenure in the region with the recent addition of three IOL parcel Exploration Agreements, eight prospecting permit applications, and more than one hundred newly staked claims. Newly formed exploration company Kaizen Discovery Inc., acquired claims and applied for prospecting permits totaling more than 3,000  $\text{km}^2$  in the westernmost part of the region. They also bought Tundra Copper Corp., a junior exploration company, which had staked claims and done preliminary exploration work in the same area earlier in 2014. Transition Metals Corp., owners of the Itchen Lake gold property, acquired 433 square kilometres of high-potential gold and base metal property near MMG Limited's Izok Corridor project. Both Glencore Xstrata plc's Hackett River and MMG Limited's Izok Corridor projects remain active in the regulatory system and both have released NI 43-101-compliant resource estimates in recent years.

130°W

120°W

110°W

100°W

90°W

80°W

## Kitikmeot Region

50 25 0 50 100  
Kilometres

Projection: Canada Lambert Conformal Conic, NAD 83



### LEGEND

#### Commodity

Base Metals	Nickel-Copper-PGE
Diamond	Rare Earth Elements
Gold	Uranium
Iron	

#### Active Mine

#### Inactive Mine

Symbol with no fill means INACTIVE.

Bold project number and name signifies major or advancing project.

#### Areas with Surface and/or Subsurface Restrictions

CPMA	Caribou Protection Measures Apply
MBS	Migratory Bird Sanctuary
NP	National Park
NWA	National Wildlife Area
TP	Territorial Park
WP	Wildlife Preserve
WS	Wildlife Sanctuary

#### Inuit Owned Lands (Fee simple title)

Surface Only
Surface and Subsurface

#### Geological Mapping Programs

Canada-Nunavut Geoscience Office
(See master legend for details)

#### Boundaries

NILCA <sup>1</sup>	Nunavut Settlement Area
	Nunavut Regions
NILCA <sup>2</sup>	Nunavik Settlement Area
	Provincial / Territorial

#### Transportation Routes

Meadowbank Road
Meliadeen Road
Milne Inlet Tote Road
Yellowknife-Contwoyo Winter Road
Proposed Bathurst Inlet Port and Road
Proposed Izok Corridor Road
Proposed Steensby Inlet Rail Line

<sup>1</sup>NILCA The Nunavut Land Claims Agreement

<sup>2</sup>NILCA The Nunavik Inuit Land Claims Agreement

**BASE METALS**

100% COPPERMINE RIVER	
<b>Operator/Owner</b>	Kaizen Discovery Inc.
<b>Commodity</b>	Copper
<b>NTS</b>	86N/07 – 86N/16, 86O/05, 86O/06, 86O/11, 86O/12
<b>Land Tenure</b>	Crown, Surface IOL
<b>Location</b>	70 km southwest of Kugluktuk

The Coppermine River property is a new project in the western Kitikmeot covering 4,240 km<sup>2</sup>. The property overlies Proterozoic flood basalts of the Coppermine River District, an area of the Bear Province historically known for its high grade copper occurrences. British Columbia-based exploration company Tundra Copper Corp. initially staked 26 claims over 310 km<sup>2</sup> based on anomalous copper values contained in AANDC's publicly-available mineral showings database.

In late August 2013, Tundra Copper conducted a one day, reconnaissance trip to the property where they collected 13 mineralized grab samples from some of the known showings. Mineralization in high grade samples typically occurs as chalcocite, bornite, and chalcopyrite and is associated with quartz veining and brittle deformation zones in basaltic rocks. Seven of the samples returned values greater than 20 per cent copper. In October 2014, Kaizen Discovery Inc. staked claims and applied for prospecting permits over 3,320 km<sup>2</sup> of prospective ground

in sedimentary-hosted strata bound copper mineralization adjacent to the original Tundra Copper property. In November, Kaizen acquired all securities of Tundra Copper through a share purchase agreement.

In 2014, Kaizen completed additional rock-chip sampling, primarily to increase knowledge of the former Tundra Copper claims. Results included values such as 4.66% Cu over 10 m and 10.20% Cu over 3.6 m.

Plans announced by Kaizen for 2015 include mapping, geophysics, and a drill program.

101% HACKETT RIVER <sup>1</sup> , WISHBONE <sup>2</sup>	
<b>Operator/Owner</b>	Glencore Xstrata plc
<b>Commodities</b>	Silver, Zinc, Gold, Copper, Lead
<b>NTS</b>	76F/15, 76F/16 <sup>3</sup> ; 76F/01, 76F/08 – 76F/10, 76G/03 – 76G/06, 76J/04, 76K/01, 76K/02
<b>Land Tenure</b>	Crown, Subsurface IOL, Surface IOL <sup>1</sup> ; Crown, Surface IOL <sup>2</sup>
<b>Location</b>	355 km southeast of Kugluktuk <sup>1</sup> , 395 km southeast of Kugluktuk <sup>2</sup>

The silver-zinc volcanogenic massive sulphide (VMS) Hackett River project is located within the Hackett River greenstone belt in the Slave Structural Province. Glencore Xstrata plc acquired both Hackett River and the adjacent Wishbone project from Sabina Gold & Silver Corp. in 2011.



Winter at Hackett River camp – Courtesy of AANDC



Massive sulphide mineralization in Izok drill core  
— Courtesy of AANDC

The Hackett River project includes three main silver-rich zinc deposits: Main Zone, Boot, and East Cleaver, as well as the Jo Zone satellite deposit. All deposits are located within a 10 km<sup>2</sup> area and occur as tabular, semi-massive to massive lenses of sulphide mineralization at or near the contact between felsic volcanics and overlying pelitic sediments. Stringer sulphide mineralization is locally developed beneath the massive sulphide lenses and stratiform disseminated sulphides surround the massive sulphide and stringer zones.

Hackett River is a world-class VMS deposit and considered to be one of the largest undeveloped deposits in Canada. An updated resource estimate was released in May 2013 that includes 25 million tonnes of indicated resources at average grades of 4.2% Zn, 0.6% Pb, 0.5% Cu, 130 grams per tonne (g/t) Ag, and 0.3 g/t Au and 57 million tonnes of inferred resources grading 3.0% Zn, 0.5% Pb, 0.4% Cu, 100 g/t Ag, and 0.2 g/t Au. This represents a 34 per cent increase from the previous resource estimate released in December 2011. A preliminary feasibility study (PFS) on the project is underway and the company has indicated that submission of the Draft Environmental Impact Statement (DEIS) to the Nunavut Impact Review Board (NIRB), previously planned for 2013, will be deferred until the PFS is complete.

The Wishbone property spans the 115 km length of the Hackett River greenstone belt, also known as the Wishbone greenstone belt, and is comprised of 238 mineral claims with a combined area of almost 2000 km<sup>2</sup>. The property

also encloses the Musk VMS deposit, discovered by Noranda Mining and Exploration Inc. in 1979. Exploration on Wishbone in 2013 was limited to electromagnetic (EM) and gravity airborne geophysical surveys to expand the geophysical knowledge of the property and to generate targets to follow-up in future programs. No work was reported in 2014.

103	104	IZOK CORRIDOR (HIGH LAKE <sup>1</sup> , IZOK LAKE <sup>2</sup> )
<b>Operator/Owner</b>	MMG Limited	
<b>Commodities</b>	Zinc, Copper, Lead, Silver, Gold; Zinc, Copper, Lead, Silver	
<b>NTS</b>	76M/07, 76M/10; 86H/10, 86H/11, 86H/14	
<b>Land Tenure</b>	Crown, Subsurface IOL <sup>1</sup> ; Crown, Surface IOL <sup>2</sup>	
<b>Location</b>	185 km southeast of Kugluktuk <sup>1</sup> , 250 km south of Kugluktuk <sup>2</sup>	

The Izok Corridor project includes the High Lake and Izok Lake VMS deposits. The project description submitted to NIRB in 2012 details other proposed components, including a 325 km road that would connect the deposits to a port at Grays Bay on the Coronation Gulf, from where mineral concentrates would be shipped seasonally. In April 2013, after screening by NIRB, the Minister of Aboriginal Affairs and Northern Development referred the project for a Part 5 review under Article 12 of the Nunavut Land Claims Agreement. Subsequently, MMG requested that NIRB not proceed until a revised project description with design alternatives that improve the economic viability of the project was complete. This revised project description was released and public meetings were held in September 2014 in Cambridge Bay and Kugluktuk. The revisions included a more efficient mine design, including changes to the proposed sequence of mining the deposits, as well as relocation of the processing plant at Grays Bay. However, despite cost saving measures, MMG announced that the Izok Corridor project is not feasible without outside partners to share the burden of infrastructure costs.

The High Lake deposits are located within the High Lake greenstone belt in the northern part of the Slave Province. These deposits have been extensively worked by a number of different operators since the initial discovery of mineralization on the property in 1955. Three main mineralized zones, AB, D, and West, have been identified on the property from which



Aerial view of Goose camp – Courtesy of Sabina Gold & Silver Corp.

an indicated mineral resource of 17.2 million tonnes grading 3.35% Zn, 2.25% Cu, 0.31% Pb, 70 g/t Ag, and 0.95 g/t Au is estimated. According to the revised project description, both open pit and underground operations are contemplated, with an estimated mine life of 11 years.

Five deposits, the Central, North, Northwest, Inukshuk, and South, are known on the Izok Lake property. Considerable exploration has taken place on the property since 1975. Mineralization is associated with felsic volcanic rocks, primarily rhyolite, overlain by carbonate-bearing sediments of the Contwoyo Formation. A significant discovery was made in 2012 concerning the host rocks for mineralization. Of the seven distinct types of rhyolite on the Izok Lake property, it was determined that only one type hosts massive sulphide mineralization. This information will be an important tool for targeting future exploration on the property.

The last published resource for the Izok deposits estimates indicated resources of 14.4 million tonnes grading 12.9% Zn, 2.5% Cu, 1.3% Pb, and 70.5 g/t Ag and inferred resources of 369,000 tonnes grading 6.4% Zn, 3.8% Cu, 0.3% Pb, and 39 g/t Ag.

Much of the work completed on the Izok Corridor project in 2013 was focused on engineering studies to assess design alternatives. The exploration program concentrated on

regional target identification along the proposed road route. In 2014, an additional \$2 million was spent on field activities. The work program included three Inuit Qaujimajatuqangit studies on traditional knowledge related to the project area and two community meetings held in Cambridge Bay and Kugluktuk in September 2014. Four diamond drill holes totaling 1,448 m were also completed. Results from these programs have not been released.

MMG planned to inform NIRB by the end of 2014 as to whether or not the company would proceed with the environmental assessment of the revised project description.

GOLD	
<b>220<sup>1</sup></b>	<b>221<sup>2</sup></b>
<b>Operator/Owner</b>	Sabina Gold & Silver Corp.
<b>Commodity</b>	Gold
<b>NTS</b>	76G/13, 76G/14, 76J/03, 76J/04 <sup>1</sup> ; 76G/09, 76G/10 <sup>2</sup>
<b>Land Tenure</b>	Surface IOL, Subsurface IOL <sup>1</sup> ; Crown, Subsurface IOL <sup>2</sup>
<b>Location</b>	365 km southwest of Kugluktuk <sup>1</sup> , 390 km southwest of Kugluktuk <sup>2</sup>

The Back River gold project comprises six properties: Bath, Boot, Boulder, Del, George and Goose. All are located in the northeastern corner of the Slave Structural Province. The project is currently focused on the George and Goose properties which both have multiple deposits of banded iron formation hosted gold mineralization.

The Goose property includes the Goose Main, Llama, Umwelt, and Echo deposits, each of which have a National Instrument (NI) 43-101-compliant resource, as well as a number of earlier stage targets, including the Boomerang, Camp, Goose Neck, Goose Hook, Goose Tail, Resurgence, and Wing zones. Drilling in 2014 targeted Echo, a mineralized zone discovered in 2009, as well as the Boomerang and Wing zones.

The Goose property is underlain by a folded sequence of Archean metasedimentary units with later-stage faulting and intrusion of felsic to gabbroic dykes, some of which are interpreted as conduits for the mineralizing fluids. The Echo zone is located in the southeastern area of Goose and is characterised by a northeast striking, variably mineralized and steeply dipping silicate iron formation, hosted within a series of clastic sedimentary units. Mineralization is generally hosted within and at the contacts of altered iron formation and is associated with pyrrhotite, pyrite, arsenopyrite, and chalcopyrite.

Twenty-five diamond drill holes were completed at the Echo deposit in 2014 for a total of 8,832 m. Results included 4.0 m of 5.22 g/t Au in drill hole 14GSE474B and 12.02 g/t Au over 5.0 m in drill hole 14GSE475. The drilling program served to both upgrade the resource estimate and to collect necessary geotechnical and metallurgical data for the area to support the feasibility study (FS). The Echo deposit is currently defined as hosting indicated resources of 607,053 tonnes at 6.80 g/t Au for 132,690 ounces of gold and inferred resources of 550,907 tonnes at 7.20 g/t Au for 127,545 ounces of gold. Upon completion of the 2014 field program, Echo remained open along strike and at depth. An additional 3,340 m was also drilled on regional targets.

The George property includes five deposits: Locale 1, Locale 2, Lone Cow Pond, GH, and Slave. The last work reported took place in 2013 and focused on the Locale 2 and Lone Cow Pond deposits. A total of 16 drill holes completed at the Locale 2 deposit focused on the Locale 2 Gap zone, a 120 m-wide area at the south end of the deposit without previous drilling and the Locale 2 Hinge zone. From the 13 holes completed on the Gap zone, the best results returned were 8.96 g/t Au over 18.5 m from hole 13GRL103

and 13.55 g/t Au over 7.0 m from 13GRL102. Drilling into the Hinge zone returned results of 18.34 g/t Au over 8.8 m from hole 13GRL104 and 7.43 g/t Au over 9.0 m from 13GRL095. This latter drill hole also intersected a second zone of 9.35 g/t Au over 7.8 m deeper in the hole. No further drilling was completed on George in 2014.

Sabina commenced a detailed FS in June 2014 and the exploration program focused on supporting the FS, including infrastructure studies and analysis, and drilling to expand resources. Estimated expenditures for the project-wide field program were \$24 million.

Sabina also released an updated resource estimate for Back River in March 2014 based on infill drilling from 2013. The new estimate consists of 10.4 million tonnes of measured resources at 5.2 g/t Au for 1,761,000 ounces of gold, 17.9 million tonnes at 6.1 g/t Au of indicated resources for 3,536,000 ounces of gold, and 8.2 million tonnes of inferred material at 7.3 g/t Au for 1,927,000 ounces of gold.

Sabina submitted a DEIS to NIRB in January 2014, as well applications to the Nunavut Water Board (NWB) for the appropriate water licence. The DEIS outlines a scenario of multiple open pits and later stage underground mining at both properties, with the central processing facilities located at Goose. The company anticipates a 5,000 tonne per day operation for production of 300,000 ounces of gold annually. By July, NIRB determined the DEIS met the technical requirements for review and public technical hearings were held mid-November in Cambridge Bay. A Final Environmental Impact Statement is expected to be submitted in July 2015.



Gossanous outcrop at Goose property – Courtesy of AANDC

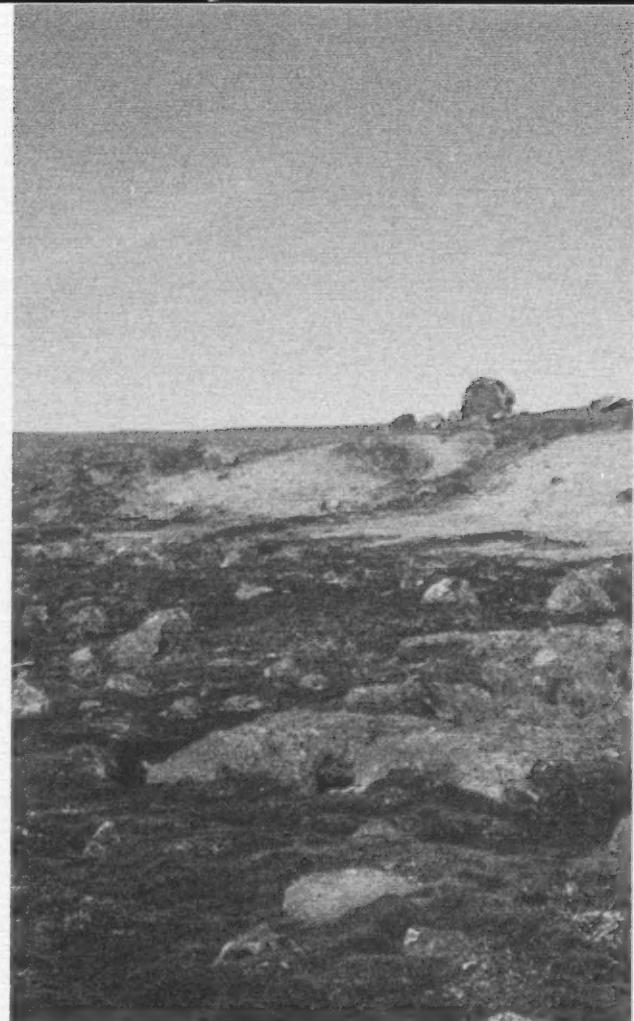
## KITIKMEOT REGION

<b>222<sup>1</sup></b>	<b>223<sup>2</sup></b>
<b>224<sup>3</sup></b>	<b>225<sup>4</sup></b>
<b>226<sup>5</sup></b>	
<b>COMMITTEE BAY (ANURI-RAVEN, FOUR HILLS-COP, INUK<sup>3</sup>, THREE BLUFFS<sup>4</sup>, WEST PLAINS<sup>5</sup>)</b>	
<b>Operator/Owner</b>	North Country Gold Corp.
<b>Commodity</b>	Gold
<b>NTS</b>	56K/07 – 56K/10 <sup>1</sup> ; 56K/07, 56K/10, 56K/11 <sup>2</sup> ; 56P/07 <sup>3</sup> ; 56J/11, 56J/12, 56J/14 <sup>4</sup> ; 56K/02 – 56K/04, 56K/06 <sup>5</sup>
<b>Land Tenure</b>	Crown, Surface IOL <sup>1,3,4,5</sup> ; Crown <sup>2</sup>
<b>Location</b>	245 km southwest of Kugaaruk <sup>1</sup> , 265 km southwest of Kugaaruk <sup>2</sup> , 130 km south of Kugaaruk <sup>3</sup> , 215 km south of Kugaaruk <sup>4</sup> , 300 km southwest of Kugaaruk <sup>5</sup>

North Country Gold Corp. holds mineral tenure along the 300 km-long Committee Bay greenstone belt. The number of claims held along this belt was pared down significantly in 2014 to core groups of claims integral to each of the five listed properties. Most work in recent years has focused on the 4.1 km long Walker Lake trend, which includes the company's flagship Three Bluffs deposit, and the Antler and Hayes zones. Several other target areas have been identified within the belt, including Anuri-Raven, Four Hills-Cop, Inuk and West Plains. Most gold mineralization at Three Bluffs is hosted within a steeply-dipping banded iron formation unit.

An updated NI 43-101-compliant resource estimate for Three Bluffs was published in April 2013 after a 7,005 m drill program in 2012. The deposit is estimated to contain 4.32 million tonnes of indicated resources at an average grade of 4.91 g/t Au and 5.52 million tonnes of inferred resources at 5.43 g/t Au, for a total of almost 1.65 million ounces of gold. North Country Gold released a more detailed analysis of this estimate in July 2014, highlighting a possible high grade ore chute. The reanalysis was calculated using a cut-off grade of 5.0 g/t, rather than the 2.5 g/t Au cut off grade from the original calculation. According to the company, a grade of 5.0 g/t Au more accurately reflects the economics of underground mining of a lode gold deposit in this location. The new data estimates a possible high-grade underground subset of the original resource containing indicated resources of 1.140 million tonnes at 11.21 g/t Au for 411,000 ounces gold and inferred resources of 1.90 million tonnes at 9.15 g/t Au for 558,000 ounces.

Although no field work was completed in either 2013 or 2014, North Country Gold was on site at its Three Bluffs



Weathered showing, Committee Bay project  
– Courtesy of AANDC

property for four weeks in late 2014 completing site and infrastructure maintenance in anticipation of a 2015 field program.

<b>227</b>	<b>HOOD RIVER</b>
<b>Operator/Owner</b>	Inukshuk Exploration Inc., WPC Resources Inc.
<b>Commodity</b>	Gold
<b>NTS</b>	76L/14, 76L/15
<b>Land Tenure</b>	Subsurface IOL
<b>Location</b>	210 km southeast of Kugluktuk

The Hood River property is located on IOL and is roughly 8,000 ha in size. The property borders the northern and eastern sides of the Ulu project and is known to host quartz vein, shear-hosted mineralization similar to that of the Flood

deposit on the Ulu property. In September 2014, WPC Resources Inc. announced an agreement to complete the purchase of all remaining shares of Inukshuk Exploration Inc., which owns the Hood River project, and announced the negotiation of an option agreement concerning the Ulu property.

The Hood River property was first actively explored during the late 1960s when an exploration company investigated newly discovered gossans in the area. Since then, there has been exploration activity by various operators that has led to the identification of multiple gold showings across the Hood River area. From the early 1990s to early 2000s, the property was evaluated for its diamond potential, resulting in two pockets within the Hood River property being claimed by Shear Diamonds Ltd. in 2010. Inukshuk and Nunavut Tunngavik Incorporated (NTI) signed a memorandum of understanding in 2012 outlining an EA for the Hood River property. The EA became official in 2013.

The Hood River project is located within the High Lake volcanic belt in the northern part of the Slave Structural Province. The property covers a series of multiple folds in



Exposed mineralized quartz vein, Hope Bay project  
—Courtesy of AANDC

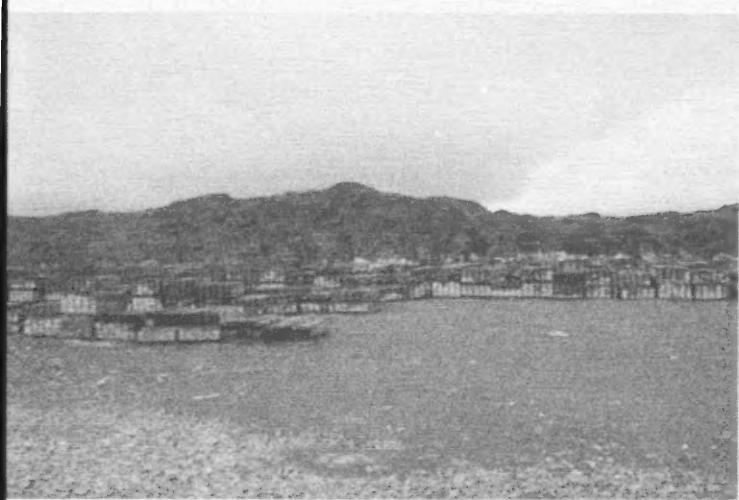
Archean-age metavolcanic and metasedimentary rocks, intruded by a later stage felsic plug, called the Peanut intrusion, which essentially dissects the folded assemblage into eastern and western components. More than a dozen anomalous gold occurrences have been recorded on the Hood River claims.

The 2014 field program focused on evaluating eight known gold occurrences and more than one hundred grab samples were collected for assay. Two of the occurrences, Penthouse North and Second Lake, lie roughly 4 km northeast of the Ulu deposit and returned values as high as 5.52 g/t Au. The highest value of the season, 57.10 g/t Au, was collected six kilometres north of the Ulu deposit at the North Fold Nose zone. The Blackridge showing, located eight kilometres southeast of Ulu, also returned significant assays of 7.44 and 10.95 g/t Au in chip and grab samples, respectively. These results will be used to prioritize drill targets for the 2015 drill program.

		228 <sup>1</sup>	229 <sup>2</sup>	HOPE BAY (BOSTON <sup>1</sup> , CHICAGO <sup>1</sup> , DORIS <sup>3</sup> , MADRID <sup>4</sup> )
Operator/Owner	TMAC Resources Inc.			
Commodity	Gold			
NTS	760/08 - 760/10, 760/15, 760/16, 77A/03			
Land Tenure	Crown, Surface IOL, Subsurface IOL			
Location	170 km southwest of Cambridge Bay <sup>1</sup> , 180 km south of Cambridge Bay <sup>1</sup> , 125 km southwest of Cambridge Bay <sup>1</sup> , 130 km southwest of Cambridge Bay <sup>1</sup>			

In March 2013, TMAC Resources Inc. acquired the Hope Bay gold project from the previous owner, Newmont Mining Corporation, through its subsidiary Hope Bay Mining Limited. The project occupies most of the 80 km-long and 7 to 20 km-wide Hope Bay greenstone belt, and is located within the Bathurst structural block of the northeast Slave Structural Province.

The Hope Bay belt includes three major target areas. From north to south, they are the Doris deposits, the Madrid trend, and the Boston deposit. Gold mineralization in the four Doris deposits (North, Lower, Connector, and Central) occurs within steeply dipping quartz-carbonate vein systems hosted by folded and metamorphosed pillow basalts over a strike-length of approximately 3 km.



Core storage yard, Hope Bay project – *Courtesy of AANDC*

Gold mineralization in the Madrid trend is lithologically and structurally controlled and is hosted within a north-south striking assemblage of mafic metavolcanic rocks over a strike-length of approximately 6 km. Many deposits and mineralized zones have been identified within the Madrid trend, but the focus of work has been on the Naartok, Patch, and Wolverine zones.

The Boston deposit is located in the southern portion of the Hope Bay belt. Gold mineralization occurs in steeply-dipping quartz-carbonate vein sets and locally in steeply-dipping zones of brecciated mafic metavolcanic rocks, hosted within folded metavolcanic and metasedimentary rocks.

TMAC inherited more than \$800 million worth of exploration data, development, and infrastructure from previous operators, including underground development at both Doris and Boston. In 2013, the company re-opened the Doris camp, activated a variety of environmental monitoring studies, and conducted a drill program totalling 29,622 m of diamond drilling in 63 holes. The focus of work in the company's initial season was on greenfields exploration targets that had little or no drilling completed in the past.

In March 2014, despite challenging market conditions, TMAC raised \$78 million to fund their 2014 field program. The company provided a presentation to the Kitikmeot Inuit Association Board of Directors in September 2014 that included updates on project development and on the 2014 drilling program. Overall in 2014, \$61 million was spent on exploration, site maintenance and development, an increase from \$50 million in the previous year. Work was completed at the mine site from May to October and included

infrastructure studies, environmental monitoring, and a drill program to update the resource. One hundred and fifty-two diamond drill holes were completed for a total of 67,817 m drilled. The drill program discovered more than 600,000 additional ounces of gold across the Doris, Madrid, and Boston deposits, and also successfully converted 800,000 ounces from the inferred to the indicated category.

TMAC signed a five-year renewal of the commercial lease for Doris North with the Kitikmeot Inuit Association and in October 2013 the Nunavut Water Board approved a 10-year renewal of its Type 'A' water licence for that deposit. Combined with the Doris North project certificate already in place, the renewal of the water licence completed all necessary permits needed to allow mining and milling to start at that deposit. Since the Doris North water licence was issued, in an effort to increase the economic viability of the project TMAC has submitted requests for amendments to both that water license and the existing project certificate to the Nunavut Water Board and NIRB respectively. TMAC has also announced plans to advance the Madrid and Boston deposits through the regulatory process with the goals of completing a DEIS by the end of 2015 and potentially then obtaining a revised project certificate and water licence by the end of 2018.

232		ITCHEN LAKE
<b>Operator,</b>	Transition Metals Corp.,	
<b>Partner</b>	Nunavut Resources Corp.	
<b>Commodity</b>	Gold	
<b>NTS</b>	76E/12, 86H/09, 86H/10	
<b>Land Tenure</b>	Crown, Surface IOL	
<b>Location</b>	270 km south of Kugluktuk	

The Itchen Lake gold project, which straddles the Nunavut-Northwest Territories border, is being explored under a strategic alliance between Transition Metals Corp. and Nunavut Resources Corporation that expires in 2017. In the past, the property has received considerable exploration interest, with approximately 80 drill holes completed on the property between 1963 and 1995 and 74 gold occurrences defined over a 40 km strike-length of banded iron formation. Before Transition Metals merged in 2013 with HTX Minerals Corp., HTX completed two sampling programs at Itchen Lake to verify historic sampling results. A total of 102 samples were collected from nine showings. The best results were returned from showing R61 that is 200 m long and up to 4.2 m wide. Nine samples collected in 2012 returned assays

between 0.09 g/t Au and 59.0 g/t Au, as compared to 13 historic samples with assays between 2.4 and 42.9 g/t Au. HTX also compiled historic exploration data for the property.

The 2013 exploration program included an 800 line-km airborne EM and magnetic geophysical survey over the property. More than 60 conductivity anomalies were identified, with some located along the same trends as known gold occurrences. Reconnaissance surface exploration including field mapping and sampling was completed and results will help with future drill targeting. Nunavut Resources Corp. and Transition Metals also initiated a remote predictive mapping research project that will incorporate Earth observation data, geophysical data, geochemical surveys, and other geoscience information to produce predictive maps. These maps will also aid in targeting for future field activities.

The Itchen Lake property is described by Transition Metals as having 17 prospective drill targets, and the company announced intentions to conduct a drill program in 2015. This will be the first drill program undertaken jointly by Transition Metals and Nunavut Resources Corp. Under the joint venture agreement, Nunavut Resources Corp. initially obtains an 80 per cent stake in any project on IOL, while Transition Metals has the right to earn up to 50 per cent as the project progresses. Properties on Crown land will be explored as equal partners.

In July, Transition Metals also negotiated an EA with NTI, thereby acquiring an additional 433 km<sup>2</sup> of land tenure in the region. Spread over three separate IOL parcels, the land covers prospective areas for both gold and base metal mineralization. This increases the total area to be explored under the strategic alliance to 1,284 km<sup>2</sup>.

233	ULU
<b>Operator/Owner</b>	Mandalay Resources Corp., WPC Resources Inc.
<b>Commodity</b>	Gold
<b>NTS</b>	76L/14, 76L/15
<b>Land Tenure</b>	Subsurface IOL
<b>Location</b>	200 km southeast of Kugluktuk

The Ulu gold project is located 155 km north of the Lupin Mine and southeast of Kugluktuk. Most work on the property by previous operators was focused on the Flood deposit where more than 135,000 m of drilling and 1.7 km of underground development was completed. A NI 43-101-compliant resource for the deposit, published in 2011, estimates an indicated resource of 751,000 tonnes at an average grade of 11.37 g/t Au and an inferred resource of 418,000 tonnes at an average grade of 10.61 g/t Au, totaling more than 400,000 ounces of gold.



Crews loading a DHC-5 Buffalo, Goose project – Courtesy of Sabina Gold & Silver Corp.

In 2013, the project was put into care and maintenance indefinitely by former owner Elgin Mining Inc. In September 2014, WPC Resources Inc. announced that they had entered into an option agreement with Elgin and their subsidiary, Bonito Capital Corp. to earn an 80 per cent stake in the Ulu gold property. Mandalay Resources Inc. has since acquired Elgin but WPC is still working towards the initially agreed upon 80 per cent ownership stake in the Ulu project. To earn the first 70 per cent under the option agreement, WPC must pay \$500,000, issue 20 million shares, and spend \$3,000,000 in exploration expenditures and development on the project, with the first-year work commitment being \$300,000. The final 10 per cent can be acquired through completion of a feasibility study within 18 months of earning the 70 per cent stake.

WPC began to fulfill the terms of the option agreement in 2014, but no results for work completed on the Ulu mining lease were reported.

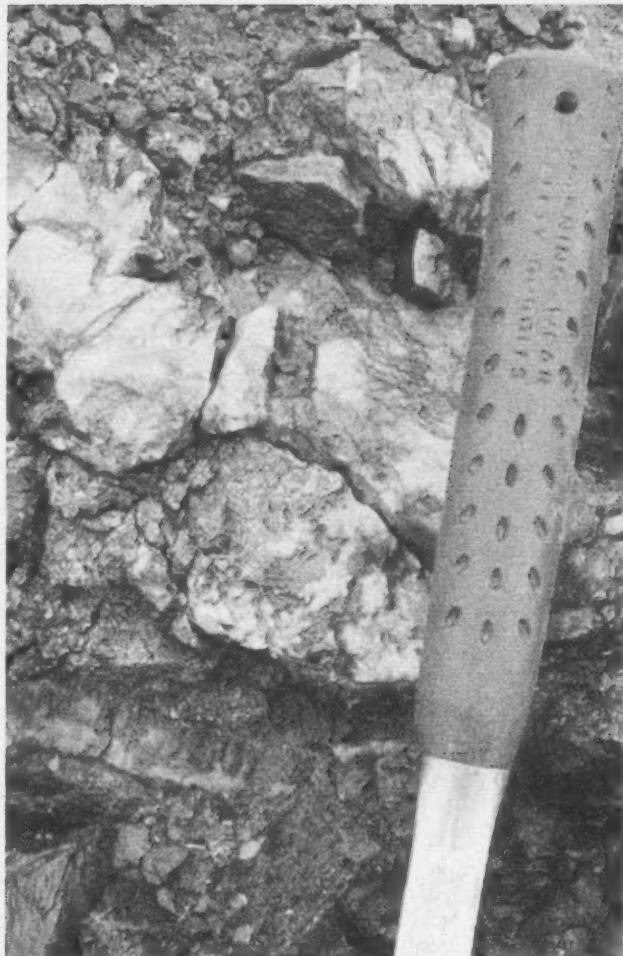
234		WISHBONE GOLD
<b>Operator/Owner</b>	Sabina Gold & Silver Corp.	
<b>Commodities</b>	Copper, Silver, Lead, Gold	
<b>NTS</b>	76F/09, 76F/16, 76G/02, 76G/03, 76G/05, 76G/06, 76G/12, 76G/13	
<b>Land Tenure</b>	Crown, Surface IOL	
<b>Location</b>	425 km southeast of Kugluktuk	

The Wishbone Gold project occupies the south-eastern portion of the Wishbone greenstone belt that also hosts the Hackett River deposits. The company sold the

Hackett River project and a substantial portion of Wishbone to Xstrata Zinc Canada (now Glencore Xstrata plc) in 2011, retaining those claims viewed as prospective for banded iron formation-hosted gold analogous to the primary host rocks at the Back River project. Sabina also acquired additional claims to bring the property to its current size of approximately 79,000 ha.

Multiple gold prospects have been identified on the property during the last several years, including Rocky, Bullwinkle, Lucky 7, Haunaco, Tauntaun, Malley, Dark Side, and Hawaii.

In 2012, 33 holes were drilled for a total of 7,479 m on the Lucky 7, Tauntaun, Rocky, and Haunaco prospects. A variety of surface exploration work, including ground geophysical surveys, geological mapping, prospecting,



Quartz veins and sulphide mineralization, Back River project – Courtesy of AANDC

and soil sampling, was also carried out at the Dark Side, Lucky 7, Malley, Hawaii, Hawaii South, and Haunaco prospects. Anomalous gold values were returned from samples collected at Dark Side, the Hawaii prospects, Malley, and Tauntaun.

In 2013, a reconnaissance surface exploration program was carried out on three blocks of claims within the property, including prospecting and 1:10,000 scale geological mapping. The program objectives were to conduct geochemical sampling and to confirm the presence of banded iron formation in the claims, as well as to map and characterize historically identified volcanic rocks. A total of 58 samples were collected, some of which returned anomalous gold and base metal values. Further mapping and follow-up of gold anomalies was planned for 2014, but no work has been reported.

Since acquiring the **Hood** copper-zinc project in 2009, MMG Limited has conducted rock and soil sampling, ground geophysics, and re-logging of historic drill core. In 2012, a total of 6,155 m of diamond drilling was carried out, along with downhole geophysical EM surveys. A drill program to test the Renegade horizon at Hood was planned for 2013 but not carried out. No further work on Hood has been reported.

Adamera Minerals Corp. (formerly Diamond North Resources Ltd.) controls the **Amaruk** project that has diamond, gold, and nickel prospects. Work was last reported on the project in 2011, including a 5,000 line-km airborne EM survey. These results have not been released.

The **Hammer** project is operated by Stornoway Diamond Corporation. In 2011, Stornoway and partner North Arrow Minerals Inc. conducted a \$1.3 million drilling and sampling program to recover sufficient material from the Hammer kimberlite for an initial diamond grade determination. No results from this program have been released.

In September 2012, Shear Diamonds Ltd. ceased operations at the **Jericho Mine** site. In January 2014, after Shear was unable to restart the past-producing diamond mine and meet the terms and conditions of its authorizations, AANDC declared the site abandoned. AANDC has worked to ensure that the environmental integrity of the site is maintained and to move towards long-term solutions, including being

open to possible private sector solutions. In October 2014, in response to a request from the Government of Canada, the Nunavut Court of Justice granted transfer of the mining leases and other assets located on Crown lands at the site to the Crown. Shear remains responsible for all obligations under the leases, land use permits, and water licenses that affect the property.

TMAC Resources controls the **Elu Belt** gold project east of its Hope Bay project. Reconnaissance exploration was carried out in 2011, but no further work has been reported.

Elgin Mining Inc.'s past-producing **Lupin** gold mine was acquired by Mandalay Resources Corp. in September 2014 as part of Mandalay's acquisition of Elgin, whose assets also included the Ulu gold project. Mandalay has announced plans to sell the Lupin property as it was not essential to the company's future plans. The Lupin property has been in care and maintenance since 2013 when Elgin introduced cost-cutting measures.

The **Oro** (Hope Bay) gold project owned by North Arrow Minerals Inc. is located adjacent to TMAC Resources' Hope Bay project. North Arrow has an option agreement with Sennen Potash Corp. (formerly Sennen Resources Ltd.) whereby Sennen can earn a 60 per cent interest in Oro. The last reported work on the property was an 11-hole, 1,225 m drill program in 2011, funded by Sennen.

NUMBER	PROJECT	OPERATOR
<b>BASE METALS</b>		
129	Hood	MMG Limited
<b>DIAMONDS</b>		
187	Amaruk	Adamera Minerals Corp.
188	Hammer	Stornoway Diamond Corporation
189	Jericho Mine	Shear Diamonds Ltd.
<b>GOLD</b>		
246	Amaruk Gold	Adamera Minerals Corp.
247	Elu Belt	TMAC Resources Inc.
248	Lupin Mine	Mandalay Resources Corp.
249	Oro	North Arrow Minerals Inc.

The Kivalliq region is the central mainland region of Nunavut on the west coast of Hudson Bay. It borders the Northwest Territories and Manitoba and is the smallest region in Nunavut covering an area of 445,109 square kilometres (km<sup>2</sup>). The bedrock geology is characterized by Archean and Proterozoic plutonic rocks, sedimentary basins, and greenstone belts of the Western Churchill province (the Rae and Hearne domains). Younger Paleozoic strata of the Hudson Bay Lowlands cover parts of Southampton and Coats Islands. The region's diverse geology hosts a number of mineral occurrences and deposits including gold, uranium, nickel, platinum group elements, lead-zinc-copper-silver, rare earth elements, and diamonds.

Rankin Inlet and Baker Lake are the most used regional hubs for exploration activity. The other Kivalliq communities of Arviat, Chesterfield Inlet, Coral Harbour, Repulse Bay,

and Whale Cove also benefit from exploration activities as needs for employees, supplies, and services continue to grow. Exploration activity in 2014 in the Kivalliq region was mainly focused on gold, uranium and diamonds.

About 80 km due north of Baker Lake is Meadowbank Mine, Nunavut's only operating gold mine. Agnico Eagle Mines Limited (Agnico Eagle) maintained lower operating costs this year and has been reporting increased gold production. On the exploration side, the company announced the signing of an agreement with NTI for the Amaruq project, located on an IOL subsurface parcel 50 km north of Meadowbank. An expanded exploration program this year produced results that significantly add to the gold potential of Amaruq. At Agnico Eagle's Meliadine gold project, investments this year included extension of the underground exploration ramp at Tiriganiaq and resource conversion drilling. The project is in the final stages of the environmental review process. The final hearing was held in August and on October 11, 2014, the Nunavut Impact Review Board (NIRB) issued their report for consideration by the Minister of Aboriginal Affairs and Northern Development and other responsible Ministers. If accepted, a project certificate is issued stipulating terms and conditions to which the proponent must adhere throughout the life of the project.

West of Baker Lake, a number of unconformity-type uranium deposits similar to those found in the Athabasca Basin have been discovered in Proterozoic rocks of the Thelon Basin. The most advanced uranium prospect in the Kivalliq region is the Kiggavik project, led by AREVA Resources Canada. The company submitted its Final Environmental Impact Statement to NIRB in October 2014 and the final hearing is scheduled for March 2015. At the Angilak project, operated by Kivalliq Energy Corporation, the company conducted a geochemical and airborne geophysical survey program in the summer season which identified a high-priority drill target for the 2015 season.

North Arrow Minerals Inc. completed a bulk sample program at its Qilalugaq diamond project northwest of Repulse Bay. The company collected more than 1,500 tonnes of kimberlite material for processing and diamond valuation.

The Kivalliq region also has two past-producing mines: the North Rankin Nickel mine at Rankin Inlet, and the Cullaton-Shear Lake gold mine north of Nettlton Lake.

Geologist examining a sample, Goose project  
— Courtesy of AANDC

## Kivalliq Region

50 25 0 50 100  
Kilometres

Projection: Canada Lambert Conformal Conic, NAD 83

Queen Maud Gulf  
MBS

Beverly CPMA

Amer Lake

520  
521

Kiggavik North

523 Meadowbank Mine

Greyhound

Inuujaavik TP

Baker Lake

Aberdeen

671 677

670 674

676

678

Kiggavik South

Mallory Lake

547

Nutaap

Agnico-Eagle Option

Dubawing Lake

Ferguson Lake

Angilik

Robin

546

544 AN

545 F13

548 Nowyak

522

Kiyuk

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

522

**BASE METALS**

400	ATLAS
<b>Operator/Owner</b>	Anconia Resources Corp.
<b>Commodities</b>	Zinc, Lead, Silver, Gold, Copper
<b>NTS</b>	55L/11, 55L/12
<b>Land Tenure</b>	Crown, Surface IOL
<b>Location</b>	165 km west of Whale Cove

The ATLAS project consists of 13 claims totaling 10,113 hectares (ha) hosting two stratiform volcanogenic massive sulphide (VMS) exploration targets, ATLAS-1 and ZAC. ATLAS-1 occurs as a 1.5 km-long continuous magnetic, electromagnetic (EM), and gravity anomaly, with exposures of massive sulphides occurring over a distance of 500 m. Assay results from 1,791 m of drilling in 2012 identified higher values of gold and silver mineralization than typically found in VMS deposits, suggesting that a second stage of mineralization may have developed. Detailed mineralogical studies on the core identified native gold and silver, as well as a variety of other silver bearing minerals.



Geologist hooking longline to helicopter

- Courtesy of AREVA Canada

ZAC is located about 20 km northeast of ATLAS-1. In 2013, the drilling program at the ZAC occurrence completed 1,306 m in five drill holes. Assay results released in January 2014 confirmed the presence of a VMS system at ZAC. Drill hole ZAC-13-01 had a 4.2 m interval with assay results of 0.53 g/t Au, 42.48 g/t Ag, 0.55% Cu, 3.59% Zn and 0.24% Pb. Drill hole ZAC-13-05 contained 110 m of disseminated and stringer sulphides with a 20.7 m section of 0.02 g/t Au, 3.97 g/t Ag, 0.16% Cu, and 0.10% Zn, including an 8.7 m section of 0.04 g/t Au, 7.66 g/t Ag, 0.31% Cu, and 0.1% Zn. A surface grab sample taken from an outcrop of the same stringer zone as ZAC-13-05, and located approximately 250 m along strike of the drill hole collar, returned assay results of 0.67 g/t Au, 57.8 g/t Ag, 1.85% Cu, and 0.01% Zn.

No work on the project was reported for 2014.

**DIAMONDS**

460	KAHUNA
<b>Operator/Owner</b>	Dunnedin Ventures Inc.
<b>Commodity</b>	Diamonds
<b>NTS</b>	550/02, 550/03
<b>Land Tenure</b>	Crown, Surface IOL
<b>Location</b>	55 km Northeast of Rankin Inlet

Kahuna kimberlite property is 55 km northeast of Rankin Inlet. The area prospective for kimberlite was first identified in a joint venture project between Shear Minerals Ltd. and Stornoway Diamond Corporation in 2001.

In November 2014, Dunnedin Ventures Inc. signed a definitive option agreement on the 13,000 ha property. In part, Dunnedin must spend a total of \$5 million, with a minimum of \$400,000 in the first year and at least \$1 million in each of the remaining three years of the option to earn 100 per cent interest in the project. In October, the company completed a private placement of common shares for gross proceeds of just more than \$1 million.

Previous operators have conducted bulk sampling, drilling, and geophysics on three main diamondiferous kimberlite dykes, the Kahuna, PST and Notch dykes. Kahuna is a 5.5 km-long steeply dipping dyke, two to four metres wide. The largest diamond recovered from Kahuna was a 5.43 carat stone believed to have come from a larger broken diamond with an original weight of 13.42 carats.

Although a pink-coloured diamond was also recovered, most are colourless to white. An average grade from an aggregate bulk sample collected from three pits totalling 356 tonnes yielded grades of approximately one carat per tonne.

Although no plans have been released, Dunnedin has stated it intends to carry out additional bulk sampling and resource definition as part of its option agreement.

461	LUXX
<b>Operator/Owner</b>	North Arrow Minerals Inc.
<b>Commodity</b>	Diamonds
<b>NTS</b>	550/12
<b>Land Tenure</b>	Crown
<b>Location</b>	60 km northwest of Chesterfield Inlet

The Luxx property is located about 20 km from the known Churchill kimberlite occurrences near Chesterfield Inlet. The project area covers about 40,400 ha and includes three prospecting permits. North Arrow Minerals Inc. acquired the Luxx project in August 2013. Along with the Mel diamond project in the Qikiqtani region, the Luxx project is part of an option agreement North Arrow has with Anglo Celtic Exploration Ltd.

North Arrow is investigating trains of kimberlite indicator minerals (garnet and ilmenite), identified from hundreds of till sample results published in assessment report data. The exact source of the till samples of interest is not currently known. In 2013, the company conducted an airborne magnetic survey of the property and completed a till sampling program near prospective target areas to better define the types of indicator minerals.

North Arrow completed two days of field work in August 2014 consisting of prospecting and more targeted till sampling. No results from this work have been released.

462	QILALUGAQ
<b>Operator/Owner</b>	North Arrow Minerals Inc.
<b>Commodity</b>	Diamonds
<b>NTS</b>	46L/09, 46K/12
<b>Land Tenure</b>	Crown
<b>Location</b>	8 km northwest of Repulse Bay (Naujaat)



Collection of kimberlite bulk sample, Qilalugaq project  
— Courtesy of North Arrow Minerals Ltd.

The Qilalugaq diamond property covers 7,143 ha and is located nine kilometres from the community of Repulse Bay (Naujaat) and only seven kilometres from tidewater. In 2013, North Arrow acquired the right to earn an 80 per cent interest in Qilalugaq from Stornoway Diamond Corp. upon completion of a minimum 1,000 tonne bulk sample from the 12.5 ha Q1-4 kimberlite complex. Previous work by Stornoway reported a National Instrument (NI) 43-101 inferred mineral resource (to 205 m depth) of 26.1 million carats at a grade of 53.6 carats per hundred tonnes in 48.8 million tonnes of kimberlite.

North Arrow budgeted \$3.7 million for their 2014 work program. During July and August, a mini-bulk sample of more than 1,500 tonnes from surface trenching was successfully collected and shipped to Thunder Bay, Ontario. Processing of the sample for commercial size diamonds (larger than 0.85 mm) began in October. Based on previous published work by Stornoway, a recovery of approximately 500 carats is anticipated for the diamond valuation to be conducted in Antwerp. Previous kimberlite samples processed from limited trenching and large-diameter drilling at Q1-4 revealed a population of fancy yellow diamonds among the micro and macrodiamonds recovered. If yellow diamonds occur in the mini-bulk sample at sizes above the 0.85 mm threshold, it could positively impact the economic potential of the Qilalugaq project. Final results of this evaluation are expected in the first half of 2015.



Core boxes, Amaruq project – Courtesy of AANDC

463 NANUQ	
<b>Operator/Owner</b>	Peregrine Diamonds Ltd.
<b>Commodity</b>	Diamonds
<b>NTS</b>	56G/01 – 56G/03, 56G/06 – 56G/11
<b>Land Tenure</b>	Crown
<b>Location</b>	225 km north of Chesterfield Inlet

The Nanuq project is located 225 km north of Chesterfield Inlet and an almost equal distance from Repulse Bay. Peregrine Diamonds Ltd. acquired a 100 per cent interest in the 127,492 ha property in 2006. Peregrine discovered three diamondiferous kimberlite pipes during their 2007 drilling program that targeted geophysical anomalies associated with indicator mineral trains. Additional field work completed from 2008 to 2011 included ground geophysics, geochemical sampling, and minor drilling. No field work was completed in 2012 or 2013.

In 2014, Peregrine completed a limited field program consisting of prospecting along two known geophysical anomalies. Sixteen samples were collected: four for indicator mineral and heavy mineral analysis and 12 for geochemical analysis. Results from this work have not been released.

GOLD AMARUQ	
<b>Operator/Owner</b>	Agnico Eagle Mines Limited
<b>Commodity</b>	Gold
<b>NTS</b>	66H/06, 66H/07, 66H/08
<b>Land Tenure</b>	Subsurface IOL
<b>Location</b>	160 km northwest of Baker Lake

The Amaruq property, formerly known as the IVR property, comprises 408 km<sup>2</sup> and is located 50 km northwest of the Meadowbank Mine. Agnico Eagle Mines Limited has entered into an Exploration Agreement (EA) with NTI and invested in a \$10 million exploration program despite initially budgeting \$1.5 million. Results of the 2014 exploration program have significantly expanded the knowledge of the property that is now thought to consist of five distinct mineralization zones. These east-west striking zones from north to south, are called the I, V, and R zones and two horizons separated by 150 m are included in the Whale Tail zone. All are considered open along strike and at depth.

Exploration work included an airborne geophysical survey that defined multiple EM and magnetic anomalies along a

10 km-long zone, coincident with 1,000 m of mineralization along strike identified from limited drilling within the geophysical anomaly. During a surface sampling effort in a boulder field 3.5 km away from the drill targets, gold mineralization was discovered over a distance of 600 m, including visible gold in some of the grab samples.

The 2014 drilling program completed 31,623 m in 144 diamond drill holes. Highlights of intercepts include 7.6 g Au/t over 3.3 m in the I zone (hole IVR14-050); 5.63 g/t Au over 12.8 m, including an interval of 4.6 m grading 11.68 g Au/t, from the R zone (hole IVR14-057); and 4.94 g Au/t over 16.7 m, including 8.12 g Au/t over a downhole length of 8.0 m, in the Whale Tail zone (hole IVR14-058). With consistently strong assay results being reported early in the program, Agnico Eagle immediately followed up with a second phase of drilling to complete an additional 20,000 m of diamond drilling from August through mid-October. One of the best intersections in the Whale Tail zone (hole IVR14-152) assayed 24.1 g Au/t over 3.5 m at a depth of 115 m and 10.8 g Au/t over 11.9 m at a depth of 134 m. More than 17,000 m (over 40 per cent) of the diamond drilling targeted the Whale Tail zone this year, outlining a minimum 1.2 km strike length and to a depth of 350 m from 60 drill holes on a 70 m by 70 m grid. Other work at Amaruq involved construction of a new exploration camp to accommodate 25 people, which Agnico Eagle plans to expand to accommodate 60 people for the 2015 exploration season.

Preliminary work suggests the style of quartz veining and structural control of mineralization appear to be more similar to that found at Meliadine than at Meadowbank, despite Meadowbank's proximity to Amaruq. Agnico Eagle intends to produce the first resource estimate for Amaruq in early 2015

and has commenced environmental baseline studies. The company is also examining options regarding an all-weather road from Meadowbank. Resource estimates could have implications on extending the mine life at Meadowbank.

521		GREYHOUND
<b>Operator/Owner</b>	Agnico Eagle Mines Limited, Aura Silver Resources Inc.	
<b>Commodity</b>	Gold, Silver, Copper, Lead	
<b>NTS</b>	56D/12, 56D/13, 66A/09	
<b>Land Tenure</b>	Crown	
<b>Location</b>	40 km north of Baker Lake	

The Greyhound precious metal and base metal property lies just 35 km south of the Meadowbank gold mine, in the vicinity of the all-weather road connecting Meadowbank to the community of Baker Lake and its inland port. Aura Silver Resources Inc. signed a definitive option agreement with Agnico Eagle Mines Limited in June 2014. The option agreement with Aura will give Agnico Eagle the opportunity to earn a 51 per cent interest in Aura's 17 Greyhound claims over three years, with an option to increase the ownership interest to 70 per cent during an additional three year period with \$1.75 million in expenditures and \$250,000 in cash payments to Aura. Agnico Eagle will be the operator of the property during the agreement.

The 2014 exploration program targeted three areas of interest: the south and southeast Aura Lake target, the north Aura Lake target, and the Dingo prospect. The south and southeast Aura Lake target, with up to 5,380 g/t Ag, was identified during soil sampling and sampling of

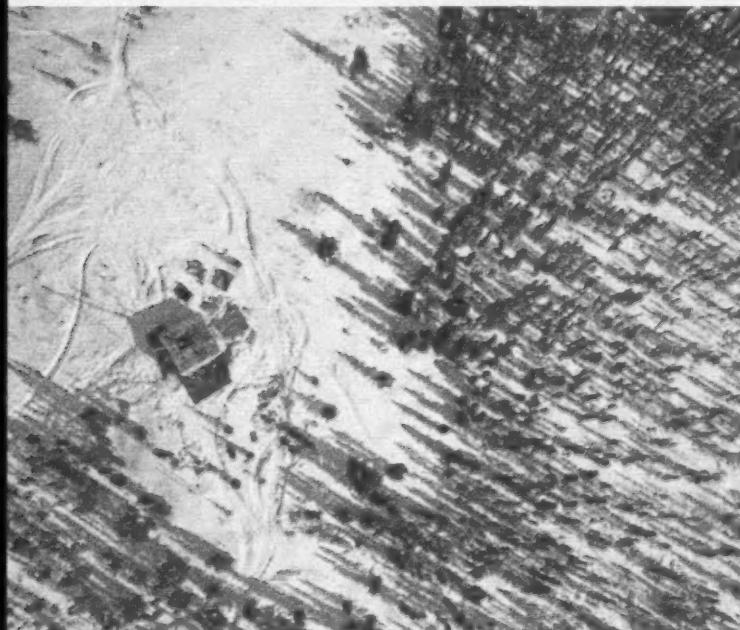


Switchback along road to Meadowbank mine – Courtesy of AANDC

sulphide-rich boulders in the area. The north Aura Lake target was identified by previous prospecting surveys with assays up to 9.2% Cu and 18.5% Zn. Dingo, to the northwest of the Aura Lake area, is a 1.7 km discontinuous north-south striking quartz vein system at the edge of a felsic sub-volcanic intrusion and mafic volcanic unit, coupled with a possible east-west trending shear structure. Previous exploration identified a 200 by 300 m gossan with copper mineralization in this area.

In July 2014, Agnico Eagle conducted a 10-day prospecting program, followed by a seven hole, 894 m diamond drilling program. A total of 328 grab samples were collected during the prospecting program and assays confirmed gold, silver and copper mineralization identified during previous exploration efforts by Aura. New assay results returned values as high as 15.5 g/t Au, 3,850 g/t Ag, and 3.3% Cu. Drilling targeted coincidental geophysical conductors and geologic structures, and drill holes intersected up to 10% pyrite mineralization over widths up to 80 m. A total of 452 samples were cut, but assays did not return significant precious metal values. Semi-massive copper sulphides (chalcopyrite and bornite) were intersected in one drill hole, located northeast of Aura Lake at the Dingo prospect.

A follow-up exploration program with a proposed budget of \$500,000 is planned for 2015.



Drill shack at Kiyuk Lake project  
— Courtesy of Prosperity Goldfields

522	KIYUK
Operator/Owner	Prosperity Goldfields Corp.
Commodity	Gold
NTS	65C/07 – 65C/10
Land Tenure	Crown
Location	350 km west of Arviat

The Kiyuk gold project is located in the southwestern Kivalliq region and covers approximately 61,935 ha of Crown land. The property includes several prospects: Rusty, Gold Point, Cobalt, Amundsen, North Snake, Bancroft, Rasmussen, and Anderson. Initial work in the area was done by the Geological Survey of Canada in the late 1970s and gold mineralization was first discovered in the early 1990s. Prosperity Goldfields Corp. has been active on the project since 2011.

The mineralization at Kiyuk occurs in a sequence of conglomerates and breccias located along an unconformity between two thick sedimentary units, the underlying Hurwitz group and the overlying Kiyuk group. The host rocks vary from brecciated sandstone at Rusty, to altered felsic volcaniclastic rocks at Cobalt and Amundsen, to altered polymictic conglomerates at Gold Point. Gold mineralization is associated with sulphide minerals, specifically pyrrhotite, pyrite, and magnetite, but also occurs as native gold grains, some of which are pristine.

Prosperity's first field season in 2011 included prospecting, geochemical sampling, and a 2,700 m drill program. Significant results were returned from Rusty, Gold Point, and Cobalt. The company followed up those results with a 2012 winter drill program focused on Gold Point and Cobalt and an aeromagnetic survey. The most significant results from the 2012 drilling program included 12 m at 3.9 g/t Au from Gold Point and 12 m at 2.3 g/t Au from the Amundsen occurrence discovered that season. The company also collected till samples for a geochemical survey.

In 2013, Prosperity completed a winter drill program, with a total of 4,427 m drilled in 20 holes. The company followed up on those drilling results with a short summer field program focused on re-logging of the previously drilled core to determine which of the several hydrothermal vein systems on the property hosts the gold mineralization. This re-logging work determined that the semi-massive sulphides and magnetite-rich breccia host the highest



Aggregate stockpiles, Meadowbank mine – Courtesy of AANDC

gold grades found to date. The company also completed legal surveying at three of its claims to begin the process of converting those claims to leases.

No work was completed in 2014 at Kiyuk. In November, Prosperity announced that it was aiming to restructure the company into a 'project generator' business model and would be seeking out joint venture partners. Under the new model, the company announced that it had entered into agreements to acquire two exploration projects in the Kivalliq region: Eric Lake and Noomut River. Both properties have reported significant historic gold assays.

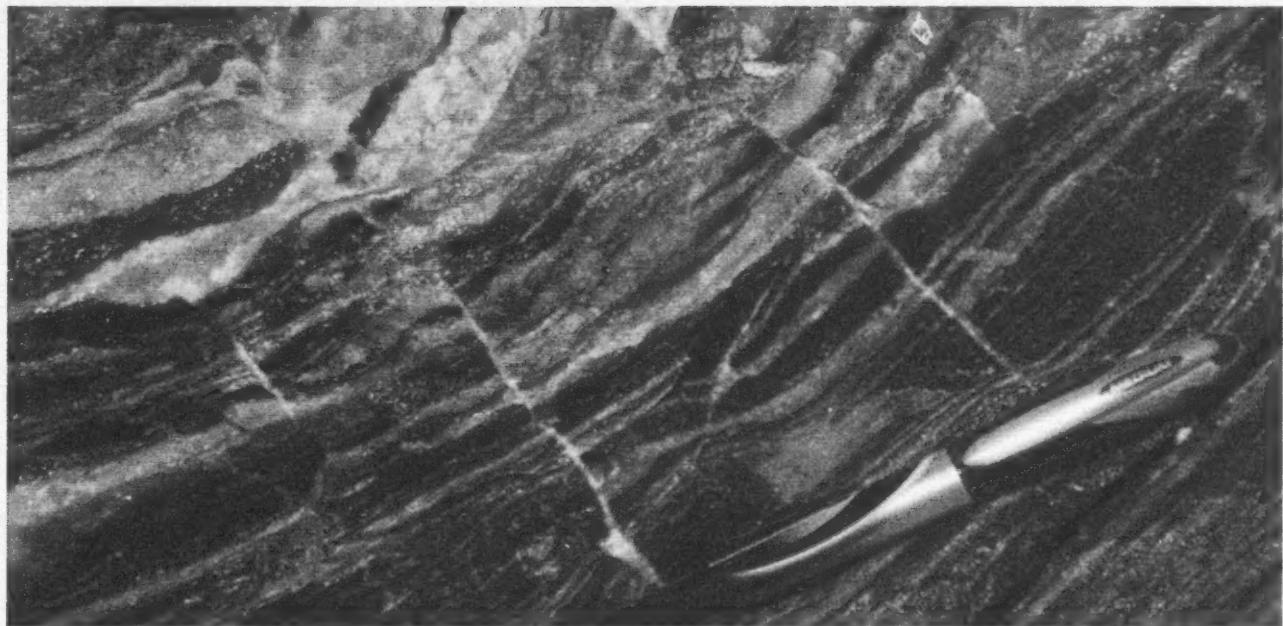
 523	MEADOWBANK MINE
<b>Operator/Owner</b>	Agnico Eagle Mines Limited
<b>Commodity</b>	Gold
<b>NTS</b>	56D/13, 56E/04, 66A/16, 66H/01, 66H/02
<b>Land Tenure</b>	Crown, Subsurface IOL
<b>Location</b>	75 km north of Baker Lake

The Meadowbank Mine is 100 per cent owned by Agnico Eagle Mines Limited. Commercial gold production at the open-pit mine began in 2010 and has increased each year since. The company is on track to exceed its 2013

production of 430,613 ounces of gold in 2014. Agnico Eagle has a mine workforce of nearly 700 people with 35 to 40 per cent of the workers being from communities across the Kivalliq region. Operations at the mine support a variety of secondary businesses in Baker Lake and elsewhere in Nunavut.

The 77,774 ha Meadowbank property includes the Goose Island, Portage, and Vault deposits that together make up the Meadowbank Mine plan and, to the west and south of the known deposits, the Meadowbank and Tehek mineral claim blocks. The Goose Island, Portage, and PDF deposits and all mine infrastructure reside on grandfathered Crown mining leases, whereas the Vault deposit lies within IOL and the company has a Mineral Production Lease with NTI. Further exploration potential exists in the Meadowbank and Tehek blocks which make up almost one third of the property to the west and south of the known deposits.

The geology of the Meadowbank Mine comprises Archean quartzites, iron formation, ultramafics, and felsic to intermediate volcano-sedimentary rocks of the Woodburn Lake group. Locally, the Woodburn Lake group is tightly folded, structurally complex and located between regional-scale granitic plutons. Host rocks and associated gold deposits are at the greenschist to amphibolite grade of metamorphism. Two main structural trends are recognized: the Meadowbank trend with the Goose Island, Portage,



Faulted veins in a rock face, Meliadine project – *Courtesy of AANDC*

and Vault deposits; and the Pipedream Lake trend, which hosts the PDF deposit. The Goose Island and Portage deposits are separated by 500 m and are both hosted by a magnetite-rich iron formation. Gold mineralization is associated with quartz veining and pyrite-pyrrhotite replacement of magnetite in the iron formation, whereas an assemblage of intermediate to felsic volcanics exhibit evident alteration and host most of the mineralization confined to shear zones at the Vault and PDF deposits.

The Goose Island gold deposit is associated with an iron formation striking south for more than 750 m with steep dips to the west that splay at depth to 500 m. The Portage deposit is approximately 1.85 km long and all lithologies are highly folded along a north-northwest trending deformation zone. The mineralized zones have true thicknesses ranging from three to 12 m and locally may be up to 20 m thick. Both fold limbs on the Portage deposit dip moderately to the west and mineralization in the lower limb of the fold is typically six to eight metres thick and may reach up to 20 m thick in the hinge zone.

The 1.2 km-long Vault deposit is located three kilometres northeast of Portage pit. It is characterized by gently dipping volcaniclastic rocks and porphyry dykes that exhibit hydrothermal alteration over widths of several metres. Mineralized zones are continuous for several hundred metres along sheared horizons containing disseminated sulfides and cutting at low angles across geological contacts. Sericite

and silicic alteration is confined to the gold-bearing ore zone and is typically eight to 12 m thick. Additional mineralized lenses can be found in the hanging wall up to five metres thick. This style of mineralization is distinct from the banded iron formation hosted deposits at Goose and Portage.

Since 2012, Agnico Eagle has controlled operating costs on several fronts and steadily improved production. In 2014, the company increased the rate of ore processing at the mill to consistently reach more than 11,000 tonnes per day and has improved gold recovery values. Agnico Eagle regularly optimized the mine pit design and higher gold grades were realised in both the Portage and Goose Pits. All of these factors contributed to considerably lower mine site costs compared to previous years. In the first nine months of 2014, Agnico Eagle produced 366,162 ounces from the Meadowbank Mine and is likely to exceed its earlier estimate of 375,000 ounces of production for 2014.

Production in the fourth quarter is expected to be similar to the third quarter of 2014 and production in 2015 is expected to remain strong due to increasing grades in the Portage pit. Current mining operations include the Portage, Goose Island, and Vault pits. Operations are expected to cease at the Goose Island pit as resources are depleted in 2014 and more ore production shifts towards Vault. Approximately 2,000 m of resource conversion drilling was carried out in 2014 into the deeper Goose South deposit and to extend the Vault deposit east and southwest. Proven and probable open

pit reserves are estimated at 1.7 million ounces of gold from 16.8 million tonnes grading 3.23 g Au/t. Indicated resources are 0.8 million ounces (7.3 million tonnes at 3.28 g Au/t) and inferred resources are 0.4 million ounces (3.3 million tonnes at 3.96 g Au/t). Four more years of mining is expected at Meadowbank with production continuing through to 2018.

524	MELIADINE
Operator/Owner	Agnico Eagle Mines Limited
Commodity	Gold
NTS	55J/13, 55J/14, 55K/16, 55N/01, 55N/02
Land Tenure	Crown, Subsurface IOL
Location	20 km north of Rankin Inlet

The Meliadine project is owned by Agnico Eagle Mines Limited. The property covers 55,892 ha, the majority of which consists of Crown mineral claims (50,334 ha) with a smaller area being on IOL. On IOL, Exploration Agreements (EA) cover 4,827 ha and Crown mineral leases cover 931 ha. Exploration has advanced in each of the past five years since the company acquired the property from Comaplex Minerals Corp. Gold mineralization is structurally controlled along multiple quartz-carbonate bearing shear zones or laminated vein quartz systems within the polydeformed turbidites and sulphidized iron formation of the Tiriganiaq Formation. Several distinct deposits have been outlined within the regional Meliadine gold trend that extends for at least 80 km along the Pyke fault in a west-northwest direction.

The Meliadine project has added significantly to Agnico Eagle's gold reserves and resources. Probable reserves on the property total 2.8 million ounces of gold from 12.0 million tonnes at a grade of 7.4 g Au/t, indicated resources are 3.1 million ounces (19.0 million tonnes at 5.1 g Au/t), and inferred resources are 2.7 million ounces (11.7 million tonnes at 7.2 g Au/t). Infill drilling at Pump, Discovery, and Wolf zones and resource conversion drilling at Tiriganiaq and Wesmeg/Normeg during the first nine months of 2014 comprised 148 holes for a total of 36,547 m of drilling. The company allocated approximately \$42 million for 2014 capital expenditures to advance the project at Meliadine.

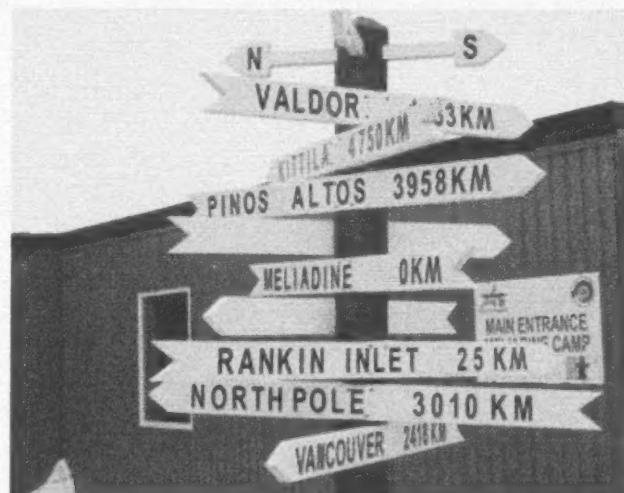
At Wesmeg/Normeg, the drill program confirmed the width of mineralization and grades of the deposit with two holes returning 12.5 g Au/t over an estimated true width of 5.3 m at 50 m depth (M14-2226) and 10.1 g Au/t over an

estimated true width of 5.8 m at 179 m depth (M14-2269). The grades reported from Wesmeg/Normeg are capped and other assays from neighbouring holes exhibit similar gold values. Additional high-grade gold values were also intersected at the Pump and Wolf deposits, with capped results of 19.8 g Au/t over an estimated true width of 5.2 m from hole M14-2220 at only 12 m depth at the Pump deposit and 18.4 g Au/t over 11.0 m (estimated true width) from hole M14-2292 at the Wolf deposit.

Re-opened in 2013, the underground exploration ramp in the Tiriganiaq deposit was extended an additional 301 m, for a total length of 527 m and depth of 168 m. The ramp project, expected to be completed by the end of 2014, will see a 1,440 m ramp reaching a depth of 225 m from which underground exploration drilling will be done to more completely delineate the deposit at depth. This drilling is anticipated to continue in 2015. Sulphide replacement (pyrite-arsenopyrite) and visible gold mineralization in both strongly and weakly magnetic iron formations characterize the 3 km-long Tiriganiaq deposit that remains open at depth and open to the west.

Improvements to the camp infrastructure at Meliadine were also carried out in 2014, as well as upgrades to the all-season road that connects the exploration camp to the community of Rankin Inlet 23 km to the south.

Agnico Eagle submitted its Final Environmental Impact Statement to NIRB early in 2014 and the technical review and final public hearing in the impact assessment process were completed in July and August respectively.



Distances to other places from the Meliadine project  
—Courtesy of AANDC



Northern lights and helicopter, Pistol Bay project – *Courtesy of Northquest Ltd.*

On October 11, 2014, NIRB issued its report for consideration by the Minister of Aboriginal Affairs and Northern Development and other responsible Ministers. If the report is accepted, a project certificate is issued stipulating terms and conditions to which the proponent must adhere throughout the life of the project.

An updated technical study for an underground operation, followed by later open pit mining, is expected to be released in late 2014 or early 2015 as the company progresses through the permitting phase for the development of a mine. If a project certificate is issued, initial mine production may begin as early as 2019.

525		PISTOL BAY
Operator/Owner	Northquest Ltd.	
Commodity	Gold	
NTS	55K/05 - 55K/07, 55K/12, 55L/08, 55L/09	
Land Tenure	Crown, Surface IOL	
Location	35 km northwest of Whale Cove	

The Pistol Bay project was acquired in December 2010 by Northquest Ltd. and consists of 104 mineral claims covering 86,129 ha. Gold mineralization on the property appears to be confined within a relatively narrow 2 km-wide zone along the west-trending structural corridor that extends for at least 90 km along the Rankin-Ennadai greenstone belt.

From 2011 to 2013, the company spent \$7.8M and completed 48 drill holes in the eastern part of the claims for a total of 9,110 m. More than half of the effort was focussed on the Vickers target, a gabbro-diorite intrusive complex. Sako, Pistol Porphyry, Cooey, and Bazooka targets were also drill tested. Ground geophysical surveys indicated that induced polarization and resistivity responses correlate with gold assay results in drill core and from locations of mineralized grab samples at surface. The best drilling intersections were obtained from Vickers (hole PB-12-22) which returned 156.5 m grading 8.23 g Au/t in 2012 and from another hole (PB13-06), which returned 138.4 m grading 3.79 g Au/t in 2013.

In March of 2014, Northquest filed a NI 43-101 technical report on the Pistol Bay project but there has been insufficient exploration data to define a mineral resource.

for the Pistol Bay Project to date. Financing for the project was achieved first through a private placement with Nord Gold N.V. for a total of \$2.5 million in June and it was announced that Nord Gold would fund an additional \$1.2 million in October.

A 6,890 line-km airborne magnetic geophysical survey was announced in July to investigate the western part of the property, acquired in 2013, at 100 m spacing. The survey is anticipated to provide more geophysical detail about the CZ and Barrett gold occurrences that have been interpreted by the company to be intrusions, iron formations, or shear zones based on the limited information available.

At the close of the 2014 exploration season, Northquest had completed a 4,550 m drill program in 18 holes, bringing the total metres drilled on the property to 13,660 m. The exploration work was designed to test the extension of the Vickers target, induced polarization anomalies and a gold-bearing boulder field at the Sako target, and the hinge zone of a synclinal fold axis in iron formation where previous drilling on a limb of the fold yielded gold assay results of 2.1 g Au/t over 11.2 m. To date, the company has reported results from four drill holes at Vickers, all returned gold values in the 1.5 to 2.0 g Au/t range over wide intervals and suggests that the Vickers zone remains open at depth and to the east. The best reported assays came from hole PB-14-07 with 6.26 g Au/t over 10.0 m at a down-hole depth of 163 m. 2.22 g Au/t over 6.0 m from hole PB-14-06 was another anomalous result. The company intends to release additional results as they become available.

#### URANIUM

		670 <sup>1</sup> 671 <sup>2</sup>	ABERDEEN <sup>1</sup> , TURQAVIK <sup>2</sup>
<b>Operator/Owner</b>	Cameco Corporation		
<b>Commodity</b>	Uranium		
<b>NTS</b>	66B/01 – 66B/03, 66B/06 – 66B/10 <sup>1</sup> ; 66A/05, 66A/12, 66B/08, 66B/09, 66B/13 – 66B/16, 66G/03 <sup>2</sup>		
<b>Land Tenure</b>	Crown, Surface IOL		
<b>Location</b>	115 km west of Baker Lake <sup>1</sup> , 105 km northwest of Baker Lake <sup>2</sup>		

Cameco Corp. owns two projects in the Thelon Basin: Aberdeen with total area of 122,713 ha and Turqavik covering 112,623 ha. In 2012, the company relocated

and constructed a new exploration camp and fuel tank farm on the south shore of Aberdeen Lake to support long term activities on the advancing projects. Several prospective targets in this part of the basin have been identified with ground EM and gravity surveys since 2006 and many were subsequently tested by diamond drilling.

Exploration activities carried out in 2012 included 33 diamond drill holes totalling 9,564 m at the Tatiggaq, Qavvik, Ayra, Sandbould, Judge Sissons, and Mammoth targets. Uranium mineralization occurs in veins and fracture-hosted zones as disseminated to massive pitchblende along distinct oxidation-reduction boundaries over wide intervals at depths between 80 and 180 m. Drilling results from Tatiggaq returned grades of 0.43% U<sub>3</sub>O<sub>8</sub> over a length of 54.2 m (TUR-052B); 0.93% U<sub>3</sub>O<sub>8</sub> over 9.0 m (TUR-056); and 1.17% U<sub>3</sub>O<sub>8</sub> over 6.1 m. Tatiggaq yielded some of the highest grades in the area of up to 24% U<sub>3</sub>O<sub>8</sub> in narrow 10 to 30 centimetre intercepts from drill core.

Cameco reduced greenfield exploration for 2013 and work concentrated on surveying 66 Turqavik claims for conversion to mineral leases. Some field-based activities included geological research on the structural geology of the property. No field work was reported on the property during the 2014 season.



Cameco camp, Aberdeen project – Courtesy of AANDC

672	ANGILAK
<b>Operator, Partner</b>	Kivalliq Energy Corporation, Nunavut Tunngavik Incorporated
<b>Commodity</b>	Uranium
<b>NTS</b>	65J/06, 65J/07, 65J/09 – 65J/11, 65J/15
<b>Land Tenure</b>	Crown, Subsurface IOL
<b>Location</b>	235 km southwest of Baker Lake

The Angilak project comprises one IOL subsurface parcel surrounded by 110 Crown mineral claims, with a total combined area of 111,478 ha. It includes the Lac 50 trend, Dipole, and RIB prospects. Since acquiring the Angilak property in 2008, Kivalliq Energy Corporation has spent more than \$55 million through geophysics, mapping, sampling programs, and more than 89,500 m of diamond and reverse circulation drilling. Exploration on the project has been focused along the Lac 50 trend, recognized as a basement-hosted unconformity-associated hydrothermal vein-type uranium deposit. The property is situated along the northern margin of the Angikuni sub-basin of the Baker Lake Basin. Uranium mineralization occurs as fracture-controlled pitchblende with sulphides chiefly hosted in graphitic-chloritic tuffaceous metasediments of the Baker Lake group.

The 2014 exploration program on Angilak consisted of 1,514 soil samples and 1,335 line-km of helicopter-borne EM geophysical surveys over selected areas of high

potential, including three targets that will be drill tested based on the geochemical sampling and preliminary results of the geophysics.

The Dipole target, located approximately 27 km southwest of the Lac 50 trend, has emerged as a top priority for drilling based on the 2014 program. Previous EM ground geophysics at Dipole identified a 2 km-long geophysical anomaly with a boulder assay of 2.24%  $U_3O_8$ , 0.94% Mo, and 116 g/t Ag. Results from the 237 soil samples taken over Dipole indicate a 3.4 km-long uranium-in-soil trend, with 107 of the soil samples returning values between 6.0 ppb and 56.3 ppb uranium. Consistent with the style of mineralization known at Angilak, anomalous copper, molybdenum, and silver were also identified along the geochemical trend. Preliminary data verification of the 2014 helicopter-borne EM geophysical survey confirmed the geophysical target at Dipole, as well as at the RIB target. Of the 211 EL soil samples collected over RIB in 2014, 74 returned uranium values between 6.0 ppb and 61.9 ppb and outlined a 3.6 km-long geochemical trend. RIB was first identified in 1976 and is located approximately four kilometres south of Dipole along the western margin of the Angikuni Basin.

Other priority areas for soil sampling were identified from Kivalliq Energy's 2013 exploration program. The 1,514 soil samples were collected over 10 grids and analyzed using a 67 element enzyme leach method. Results from a quarter of these samples ranged from 6.0 ppb U to 285 ppb U. Drill targets Hot and KU have also been upgraded in priority based on the geochemical results of the soil sampling.

Kiyuk Lake Camp in the distance – Courtesy of Prosperity Goldfields

An updated NI 43-101-compliant resource estimate for the Lac 50 trend deposit, consisting of the Main, Western and Eastern Extension, J4, and Ray zones, was released in early 2013. Using a cut-off grade of 0.2% U<sub>3</sub>O<sub>8</sub> and including results from diamond drilling in 2012, the company added 60 per cent to its previous resource estimate. The inferred uranium resource has been revised to 2.83 million tonnes grading 0.69% U<sub>3</sub>O<sub>8</sub> for a total of 43.3 million pounds of uranium. Using the same uranium cut-off grade, the combined deposit has the potential to be a polymetallic producer with inferred mineral resources of 1.88 million ounces of silver, 10.4 million pounds of molybdenum, and 15.6 million pounds of copper.

Independent metallurgical tests were also carried out and preliminary results indicate good uranium recovery using an optimized alkali leaching process that exceeded 95 per cent uranium in 24 hours and 97 per cent uranium in 72 hours. The yellowcake test product was of high quality, with uranium values of 71.9 per cent and impurities below maximum uranium ore concentration limits according to American Society for Testing and Materials specifications. Although further metallurgical testing is required, initial results are encouraging and indicate that Lac 50 deposits have favorable ore processing characteristics.

673	BAKER BASIN
Operator, Partner	Kivalliq Energy Corporation
Commodity	Uranium
NTS	55M/10 – 55M/15
Land Tenure	Crown, Surface IOL
Location	70 km Southeast of Baker Lake

In October 2013, Kivalliq Energy Corporation further expanded its interest in the Kivalliq region by entering into an agreement with Pacific Ridge Exploration Ltd. to acquire 100 per cent ownership of the mineral rights (excluding diamonds) on the Baker Basin uranium property. The tenure consists of 95 claims on 93,993 ha and the agreement includes results from \$7.1 million of proprietary exploration work previously completed on the claims. The property is located on the southern margin of the paleoproterozoic Baker Lake Basin and hosts several promising targets, including the 694, 7-one, KZ, Lucky-7, Niner, and TK zones. Previous exploration drilling programs were completed more than 70 drill holes on the property and some yielded good indications of uranium mineralization. The mineralization



Alpine campion (*Lychnis alpina*) – Courtesy of AANDC

is associated with brittle fracturing in basement gneisses in the 694 Zone, silicic and hematitic alteration in Kazan sandstones from the KZ Zone, and as disseminated clots or narrow seams of pitchblende within bleached alteration zones of Kazan sandstone in the Lucky-7 target. Some analysis results from drill hole data include 0.84% U<sub>3</sub>O<sub>8</sub> over 5.4 m (hole KZ-10) and 1.68% U<sub>3</sub>O<sub>8</sub> over 2.4 m (hole T-5). The company has not disclosed any further plans for the project and is currently completing a review of available data.

674	KIGGAVIK
Operator, Partner	AREVA Resources Canada Inc., Daewoo International Corporation, JCU Exploration (Canada) Co. Ltd.
Commodity	Uranium
NTS	66A/05, 66A/06, 66A/11, 66A/12
Land Tenure	Crown, Surface IOL, Subsurface IOL
Location	80 km west of Baker Lake

The Kiggavik uranium project, west of Baker Lake in the Thelon Basin, covers an area of 32,203 ha on 37 Crown and IOL mining leases at Kiggavik and Sissons, and 16,682 ha on 18 Crown mineral claims at the St. Tropez prospect. The project is currently held as a joint venture with JCU Exploration (Canada) Co. Ltd. (33.5 per cent) and DAEWOO International Corp. (1.7 per cent) with AREVA Resources Canada as the majority partner (64.8 per cent) and operator of the project.

## KIVALLIQ REGION

Since 2007, AREVA has invested more than \$100M at Kiggavik. The property has seen extensive exploration work carried out on five main mineralized deposits: Main, Centre, East, Andrew Lake, and End Grid. Several other deposits and prospects on the property have also been investigated, including Bong, Sleek, Jane, and Granite. The Kiggavik Main, Centre, and East deposits lie about two kilometres south of the Thelon fault zone that juxtaposes older basement metasedimentary units against younger Thelon sandstone. Approximately 10 km farther south is a parallel east-trending fault zone called the Judge Sissons fault zone where the Andrew Lake and End Grid deposits are located. Polyphase and extensive illite-sericite altered metasedimentary units host the majority of the uranium mineralization discovered in the area. Mineralization also occurs in equally altered granite and late intrusive dykes. The primary uranium mineral is pitchblende with coffinite appearing as a minor component.

Exploration in 2014 consisted of a drilling program designed to test strongly altered and mineralized zones identified south of the Bong deposit in 2013, and to pursue additional greenfield exploration targets based upon new mineral prospectivity analysis developed by the company in conjunction with new detailed structural and lithological analysis results. The drilling program completed 11,161 m in 45 holes. Encouraging results were obtained from drill targets along the major structural trends that host the known deposits. A number of ground geophysical surveys totalling 439 line-km of EM and 131 line-km of gravity were completed over six different grids on the property. These were carried out over areas that do not have detailed ground gravity surveys, but exhibit favourable structural or other geophysical characteristics. In mid September, 362 line-km of EM airborne geophysics was completed over selected areas to investigate if alteration associated with mineralization can be detected using this technique. Results of these surveys have not yet been released.



Pistol Bay project's base camp – *Courtesy of Northquest Ltd.*

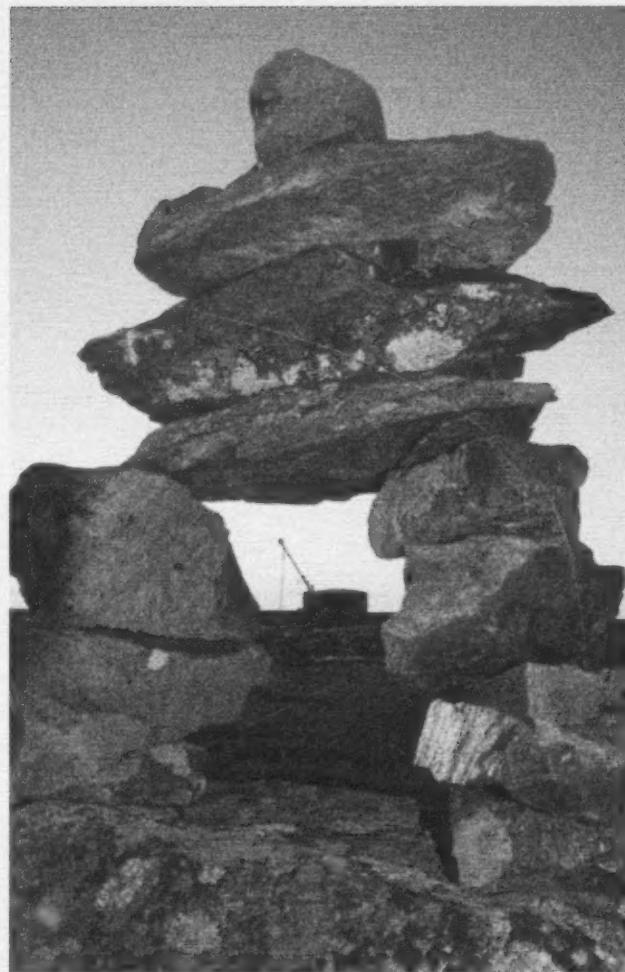
In October, AREVA received a positive compliance ruling from NIRB on the Final Environmental Impact Statement for the Kiggavik project. Technical reviews have been initiated and the final hearing is scheduled for March 2015. The mine plan consists of four deposits to be exploited using open pit mining and a fifth deposit that would be accessed as an underground mining operation. The \$2.1 billion project proposal outlines a three to four year period to construct the mine, a 14-year operating mine life, and a ten year closure, decommissioning, and monitoring period. One open pit and the underground workings would be built at the Sissons site, approximately 20 km southwest of Kiggavik. The mine construction phase would require about 750 workers and the mine, once in operation, would provide up to 600 jobs. In preparation for the final public hearings, AREVA convened Inuit Qaujimajatuqangit traditional knowledge workshops in Baker Lake and Chesterfield Inlet in 2014 to understand differences between Inuit traditional knowledge and scientific sources of knowledge.

Following the impact review process, AREVA will conduct a final feasibility study prior to making a development decision on the Kiggavik project.

	675 676 677 678	NORTH THELON (AGNICO EAGLE OPTION <sup>1</sup> , INUIT OWNED LANDS <sup>2</sup> , KIGGAVIK NORTH <sup>3</sup> , KIGGAVIK SOUTH <sup>4</sup> )
Operator, Partner	Forum Uranium Corp. <sup>1,4</sup> , Agnico Eagle Mines Limited <sup>1</sup>	
Commodity	Uranium	
NTS	66A/05, 66A/06, 66A/11 <sup>1</sup> ; 66A/07, 66B/02, 66B/07, 66B/08 <sup>1</sup> ; 66A/05 – 66A/07, 66A/09 – 66A/12 <sup>2</sup> ; 66A/04 – 66A/06, 66B/01, 66B/08 <sup>3</sup>	
Land Tenure	Crown, Surface IOL <sup>1,3,4</sup> ; Subsurface IOL	
Location	70 km west of Baker Lake <sup>1</sup> ; 55 km west of Baker Lake <sup>2</sup> ; 65 km northwest of Baker Lake <sup>3</sup> ; 90 km west of Baker Lake <sup>4</sup>	

The North Thelon project near Baker Lake is located on 198,000 ha in the Thelon Basin on both Crown and IOL. The project is 100 per cent owned and operated by Forum Uranium Corp.

The Judge, Long Lake, and Pyro South areas of the property, as well as IOL parcel BL-32 were the focus of exploration work in 2014. A total of 25 rock samples were collected. Long Lake is a new showing identified by Forum with assay



Inuksuk and drill site at sunset on the Vickers target, Pistol Bay project – Courtesy of Northquest Ltd.

values from boulder and outcrop samples of 34 ppm U<sub>3</sub>O<sub>8</sub> to 128 ppm U<sub>3</sub>O<sub>8</sub>. Arkosic boulders from the BL-32 area returned assays of up to 98 ppm U<sub>3</sub>O<sub>8</sub>.

In early 2014, Forum signed a purchase and sales agreement to acquire 100 per cent interest in Agnico Eagle's Judge Sissons and Schultz Lake claims with an aim to consolidate its North Thelon property holdings. This replaces a previous option agreement signed with Agnico Eagle in 2008. The claims are adjacent to AREVA Resources Canada Inc.'s Kiggavik uranium project.

Forum has stated that it has been relieved of work expenditures for 2014 and 2015 on its IOL parcels BL-21 and BL-32 by NTI, but is required to resume work in 2016 according to the terms of the company's EA with NTI.

Adamera Minerals Corp. (formerly Uranium North Resources Corp.) has five inactive gold properties throughout the Kivalliq. The **Mallery Lake** gold prospect, located southwest of Baker Lake, had five holes drilled in 2011. The company reported mineralization in each hole, with assay values of up to 4.62 g/t Au over 3.0 m. On Adamera's **Nowyak** property in the Yathkyed greenstone belt west of Arviat, gold is associated with sulphides in altered shear zones. Assay results from several grab samples collected in 2011 returned gold values from 22.3 g/t to 72.1 g/t. No follow-up work was carried out on either the Mallery Lake or the Nowyak property since 2011. Adamera has not reported work on its **Angikuni Lake** (AN, F13, Robin) gold projects, located in the southwest Kivalliq, since a prospecting and geophysics program in 2011.

The **RB** gold property is a group of four claims located 110 km northwest of Whale Cove. In 2011, owner Anconia Resources Corp. collected and analyzed 73 grab samples

of which 26 returned gold values greater than 2.0 g/t. No follow-up exploration plans have been announced.

Ridgemont Iron Ore Corp. owns the **Maguse River** iron project, located 80 km north of Arviat. Archean iron formations were the subject of airborne magnetic and EM surveys, reconnaissance mapping, and sampling, including 6,000 m of diamond drilling on the property in 2011. No results or further work have been reported.

Canadian North Resources and Development Corp. purchased the **Ferguson Lake** project in 2013 from Starfield Resources Inc. when Starfield underwent restructuring. Starfield acquired the nickel-copper-cobalt-platinum-palladium VMS occurrence in 1999. In 2011, Starfield drilled 1,866 m and in 2012, the company released an updated Preliminary Economic Assessment of the property. Canadian North Resources and Development Corp. has not released information as to its plans for Ferguson Lake.



Mountains and glaciers on the coast, Ellesmere Island – *Courtesy of AANDC*

Work was last reported on the **Nutaaq** rare earth elements property in 2011 when a rock and soil geochemical sampling program was carried out. The property, owned by Forum Uranium Corp., is subject to a 2 per cent net smelter royalty to NTI.

In 2011, Adamera Minerals Corp. completed a series of reverse circulation drill holes, totaling 2,285 m, on the **Amer Lake** uranium property. The company subsequently published an inferred uranium resource for the property of 22.9 million tonnes at 0.041% U<sub>3</sub>O<sub>8</sub> for a total of 20.9 million pounds of U<sub>3</sub>O<sub>8</sub>. Sub-horizontal horizons containing graphite were also encountered during drilling. These horizons were found to be up to 25 m thick and contain 4.13% graphite. The company has not reported on exploration work at the property since 2011.

The **Thelon Basin** uranium project, formerly owned by Mega Uranium Ltd., was purchased in 2012 by NexGen Energy Ltd. The property is located 150 km north of Baker Lake in the northeastern part of the Thelon Basin. The last work reported at the site was in 2008. Plans for follow-up activity in 2011 were announced but no work has been reported.



Core boxes on a rack, waiting to be slung back to camp for logging, Meliadine project – *Courtesy of AANDC*

NUMBER	PROJECT	OPERATOR
<b>GOLD</b>		
544-548	Angikuni Lake (AN – 544, F13 – 545, Robin – 546), Mallory Lake, Nowyak	Adamera Minerals Corp.
549	RB	Anconia Resources Corp.
<b>IRON</b>		
579	Maguse River	Ridgemont Iron Ore Corp.
<b>NICKEL-COPPER-PLATINUM GROUP ELEMENTS</b>		
639	Ferguson Lake	Canadian North Resources and Development Co.
<b>RARE EARTH ELEMENTS</b>		
669	Nutaaq	Forum Uranium Corp.
<b>URANIUM</b>		
698	Amer Lake	Adamera Minerals Corp.
699	Thelon Basin	NexGen Energy Ltd.

## QIKIQTANI REGION

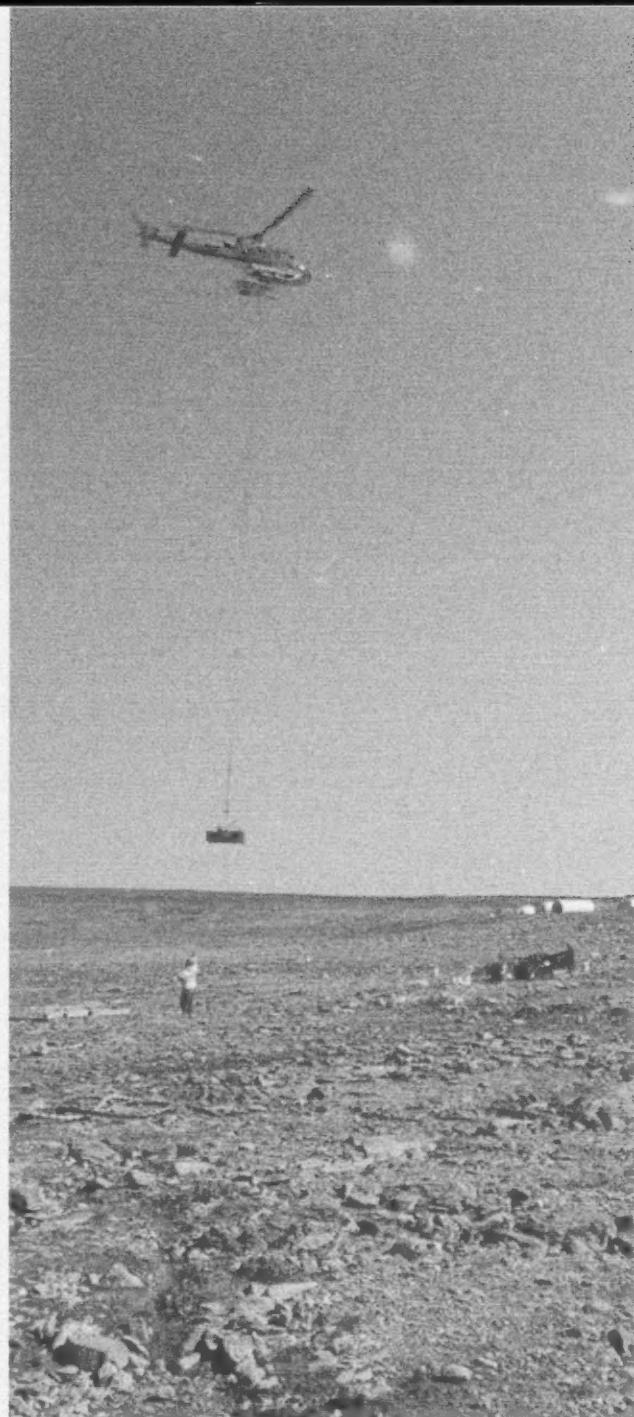
Nunavut's largest administrative district, the Qikiqtani region covers an area of 1,040,418 square kilometres (km<sup>2</sup>). Its land mass is mainly islands of the Canadian Arctic archipelago, including Baffin, Devon, Cornwallis, Bathurst, Ellesmere, and many smaller islands. The northern part of the Melville Peninsula is also included within the Qikiqtani region, as are the Belcher Islands in southeastern Hudson Bay.

Iqaluit, the territorial capital, is located on Baffin Island and is a major centre for exploration-related supplies and support services for the region. Other Qikiqtani communities which benefit from exploration projects through providing services, supplies, or employees include Igloolik, Hall Beach, Pangnirtung, Pond Inlet, Arctic Bay, and Clyde River. Cape Dorset, Grise Fiord, Kimmirut, Qikiqtarjuaq, Resolute, and Sanikiluaq are also located in the region.

The Qikiqtani region is underlain by Archean and Proterozoic rocks of the Churchill Province, and Paleozoic rocks of the Arctic Platform and Innuitian Belt. As a result of the wide variety of rocks, the region hosts a range of mineral deposits and occurrences, including iron, base metals, gold, platinum-group elements (PGE), diamonds, and sapphires. There are two past-producing mines in the region: the Polaris lead-zinc mine, on Little Cornwallis Island, and the Nanisivik zinc-lead-silver mine, on northern Baffin Island near Arctic Bay. This year, exploration and mine development in the Qikiqtani region was focused on iron, diamonds, and base metals.

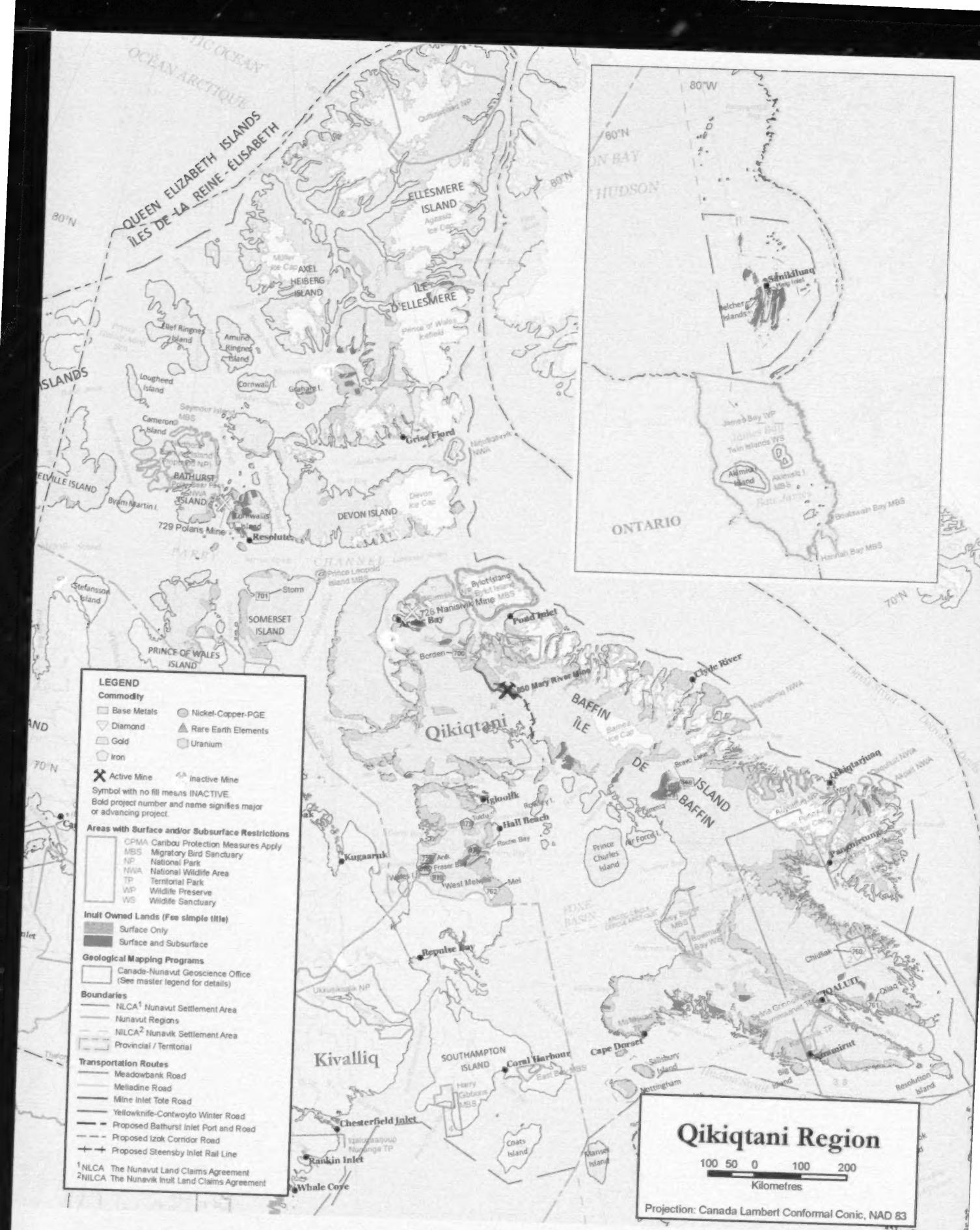
A major development in the region was the start of iron ore production at Mary River, close to Pond Inlet, in September 2014. Production was delayed after Baffinland Iron Mines Corporation scaled back to an 'early revenue phase' in mid-2013 in order to decrease start-up capital costs. In November 2014, shortly after production began, the company announced that they would seek approval from the Nunavut Impact Review Board (NIRB) to triple the amount of ore trucked to Milne Inlet for shipping and to expand the shipping season to 10 months of the year. First shipments of iron ore are expected to leave Baffin Island after the sea ice breaks up in 2015.

Aston Bay Holdings Ltd. announced in December 2014 that it had signed a joint venture agreement with Antofagasta plc on the Storm copper project, located on Somerset Island. The partners completed a field program on the property in September 2014, which determined that copper mineralization on the property extends along a strike length of 30 km, three times longer than the previously defined 7 km zone.



Drill rig move, Chidliak project – Courtesy of Peregrine Diamonds Ltd.

On southern Baffin Island, Peregrine Diamonds Ltd. continued work on its 100 per cent-owned Chidliak diamond project, with work focused on determining the economic potential of kimberlites CH-6, CH-7, and CH-44, including preparations for a bulk sample in the 2015 season. Four new kimberlites, CH-68, CH-69, CH-70, and CH-71, were discovered on the property during field work and drilling on priority targets identified in the 2013 season.



## Qikiqtani Region

100 50 0 100 200  
Kilometres

Projection: Canada Lambert Conformal Conic, NAD 83



Copper-mineralized boulders in frost boil, Storm project  
— Courtesy of Aston Bay Holdings

#### BASE METALS

700	BORDEN
Operator, Partner	MMG Limited
Commodities	Copper, Zinc
NTS	48A/02, 48A/06, 48A/07
Land Tenure	Crown, Surface IOL
Location	150 km from Arctic Bay, 135 km from Pond Inlet

The Borden permits are located at the northern end of Baffin Island, southeast of the community of Arctic Bay. The five permits cover approximately 119,400 ha over the Borden basin, a Mesoproterozoic sedimentary basin that hosts the past-producing Nanisivik lead-zinc mine.

MMG Ltd. received the prospecting permits in February 2014. To date, no work has been reported on the property.

701	STORM
Operator, Partner	Aston Bay Holdings, Antofagasta plc
Commodities	Copper, Zinc, Silver
NTS	58C/10, 58C/11, 58C/13, 58C/14
Land Tenure	Crown, Surface IOL
Location	120 km south of Resolute

The Storm copper-zinc-silver project, located on the northwest coast of Somerset Island, was optioned by Aston Bay Holdings from Commander Resources Ltd. in

November 2011 and currently consists of 139,630 hectares (ha) of mineral claims. The Storm project includes two prospects, Storm Copper and Seal Zinc, both of which are near tidewater. The first discovery of mineralization at the property was made by Teck Cominco in the 1990s.

Zinc mineralization on the Seal prospect is primarily in the form of strata-bound massive sphalerite hosted in carbonate rocks. At Storm, copper mineralization occurs as malachite, azurite, chalcocite, and bornite hosted in brecciated carbonates. The malachite and azurite are commonly found in mineralized boulders brought to the surface by freeze-thaw processes fragmenting bedrock.

In January 2013, the company acquired a database containing unreleased technical data from Teck Resources Ltd., including drill core logs, soil and sediment samples, and geophysical data. Exploration at Storm in 2013 consisted of soil sampling, resampling of historical drill core and modeling of the results, and identification of targets for future sampling and drilling. On the Seal Zinc prospect, the company collected a 200 kg mini-bulk sample for metallurgical analysis.

In September 2014, the company announced that it had completed a summer field program on the Storm property that included geological mapping, prospecting, and soil sampling. Results from the program extend the strike length of mineralization by an additional 23 km, bringing the total length of the known mineralized zone on the property to 30 km. Several previously unknown mineralized showings were discovered and sampled. No further results have been reported by the company to date.

The Storm property is subject to two different joint venture agreements. Under the terms of the option agreement between Aston Bay and Commander Resources, Aston Bay must conduct \$6 million worth of exploration work on the properties by December 2015 to earn a 50.1% interest in the project, including \$2 million per year in 2014 and 2015. In addition to the option agreement with Commander Resources, Aston Bay also signed a Memorandum of Understanding in June 2014 with Antofagasta plc, which gives Antofagasta the opportunity to earn up to a 70% interest in the Storm project during four project phases. The agreement is contingent on total spending of \$16 million dollars over nine years by Antofagasta and on the determination that the property holds an indicated resource of at least 15 million tonnes of copper ore. In December 2014, Aston Bay and Antofagasta announced that a definitive joint venture agreement had

been signed and that the two partners would be working together to determine a field program and budget for the summer 2015 season.

#### ▼ DIAMONDS

	760 CHIDLIAK
Operator, Partner	Peregrine Diamonds Ltd.
Commodity	Diamonds
NTS	25P/13, 250/15, 250/16, 26A/04 – 26A/06, 26A/12, 26A/13, 26B/01 – 26B/03, 26B/06 – 26B/11, 26B/14 – 26B/16
Land Tenure	Crown, Surface IOL
Location	115 km northeast of Iqaluit

Peregrine Diamonds Ltd.'s Chidliak diamond project is located northeast of Iqaluit, on the Hall Peninsula of Baffin Island. The project's land tenure covers 747,793 ha of Crown and surface Inuit Owned Land (IOL). Chidliak is the

largest diamond exploration program in Nunavut, based on the project's total area and the large number of known kimberlites on the property.

Exploration at Chidliak began in 2005 with the discovery of three occurrences of high concentrations of kimberlite indicator minerals (KIM). Glacial till sampling for KIM during the next two years identified high numbers of G10 garnets. Peregrine discovered three kimberlites in 2008 (CH-1, CH-2, and CH-3) and between 2009 and 2011 further exploration brought the number of kimberlites identified to 59. In December 2011, Peregrine exercised its option to buy back BHP Billiton's 51 per cent interest in Chidliak and became the sole owner and operator of the project.

In early 2013, Peregrine completed a winter bulk sampling program on the CH-6 kimberlite which collected a total of 508 wet tonnes of kimberlite material through surface trenching. The winter program was followed by a \$2-million summer field program, operated by De Beers Canada Inc. as part of a joint venture agreement with Peregrine that included geologic mapping, prospecting, and ground geophysical surveys. The summer program resulted in



Drill rig at CH-46 kimberlite, Chidliak project – Courtesy of Peregrine Diamonds Ltd.



Bulk sample of kimberlite, Chidliak project – *Courtesy of AANDC*

the discovery of six new kimberlites on the property, but in October 2013, De Beers notified Peregrine it would not exercise its right to continue with the joint venture on the Chidliak property. Therefore, Peregrine continues to hold a 100 per cent interest in the project.

Peregrine released an update on the bulk sample analysis in January 2014, which included results from Batch C. This batch had an average grade of 2.87 carats per tonne and included a population of yellow diamonds. In total, the bulk sample had an average grade of 2.78 carats per tonne and a total of 1,124 carats of commercial sized diamonds (greater than 0.85 mm in size). The company followed with the publication in February 2014 of diamond valuation results on a 1,013-carat sub-parcel of diamonds recovered from the bulk sample that were larger than 1.13 mm in size; thirteen diamonds in that parcel were larger than 3 carats. The largest diamond, an 8.87 carat white/colourless octahedron with minor inclusions, was valued at \$36,158 US.

Peregrine's \$7-million 2014 field program began in March with a 2,250 line-km ground geophysical survey and a drill program to measure overburden depths on CH-44 and CH-7; this drill program determined that trenching for a planned 2015 bulk sample would be feasible. Summer fieldwork on the project included 3,305 metres of core drilling and 994 metres of reverse-circulation drilling on kimberlites CH-6, CH-7, and CH-44. Drill rigs and other equipment for the 2015 bulk sampling program were also mobilized. Other supporting work included preliminary geotechnical, metallurgical, and infrastructure studies, and continued environmental baseline monitoring. Peregrine also held community consultation meetings on the Chidliak and Qilaq projects in Pangnirtung and Iqaluit in March.

In June 2014 the company filed an updated National Instrument (NI) 43-101 report on the Chidliak project, which included an inferred resource for CH-6 of 7.47 million carats at an average price of \$213 US per carat. The kimberlite remains open at depth and some

of the 2014 drilling was designed to allow conversion of further volume at depth in the kimberlite to an inferred resource. Peregrine intends future work on CH-6, CH-7, and CH-44 to support a possible completion of a preliminary economic assessment of the project in 2016.

Peregrine announced in December that four new kimberlites had been identified on the Chidliak property in 2014. CH-68 was discovered during summer prospecting and mapping field work, and CH-69, CH-70, and CH-71, which was originally drilled in 2010, were identified through reverse circulation drilling on several magnetic anomalies. A total of 1,418 kg of kimberlite material is currently being analyzed for its microdiamond content. The company plans to update its resource and tonnage estimates for kimberlites CH-6, CH-7, and CH-44 in January 2015.

761	QILAQ
Operator/Owner	Peregrine Diamonds Ltd.
Commodity	Diamonds
NTS	250/01, 250/02, 250/08, 25P/05, 26A/06, 26A/12, 26A/13
Land Tenure	Crown, Surface IOL
Location	110 km east of Iqaluit

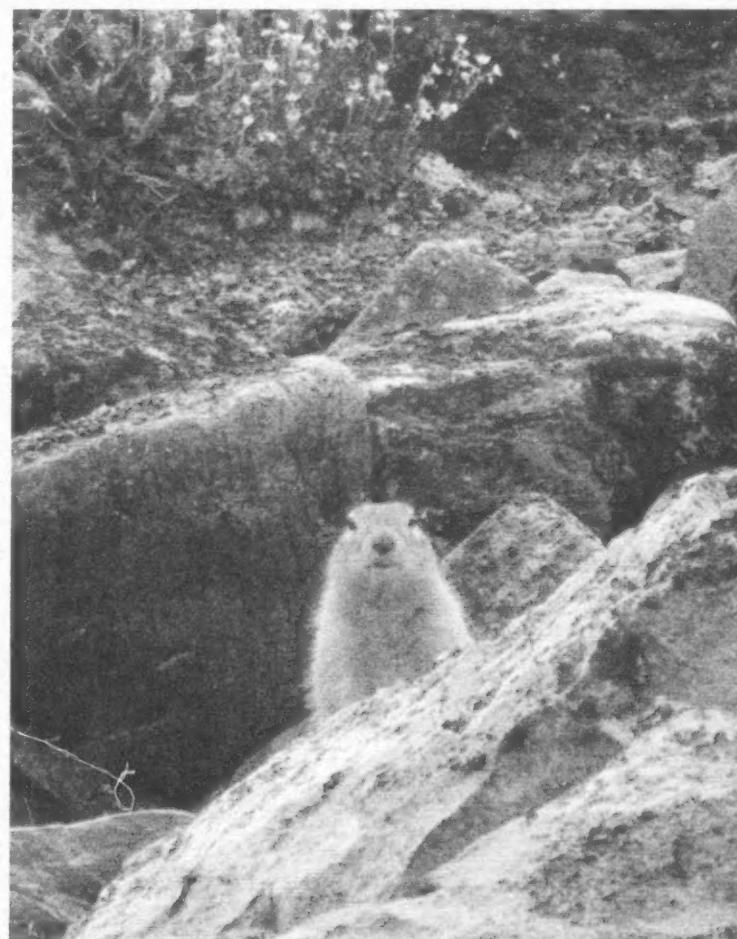
The Qilaq diamond project, located east of Iqaluit on the Hall Peninsula, consists of 95 claims totalling 51,147 ha of tenure. Prior to the 2014 field season, the last reported work on Qilaq was done in 2011 to evaluate KIM and gold and platinum-group metal anomalies on the property. This year the company returned to focus on its diamond potential.

Three kimberlites have been found to date on the Qilaq property and work by Peregrine on the property in 2014 included a short sampling program during which several grab and till samples were collected. No results from this work have been reported.

762	MEL
Operator/Owner	North Arrow Minerals Inc.
Commodity	Diamonds
NTS	460/08, 460/09
Land Tenure	Crown, Surface IOL
Location	140 km south of Hall Beach

North Arrow Minerals Inc. acquired the Mel project in August 2013. The project consists of five prospecting permits covering approximately 73,865 ha of Crown and surface IOL, and is part of an option agreement with Anglo Celtic Exploration Ltd., along with the Luxx diamond project in the Kivalliq region. Previous exploration interest in the area was in base metals and nickel-copper-platinum-group element occurrences; however, North Arrow's current exploration focus is on diamonds.

The main exploration targets at Mel are two KIM trains whose sources are currently undefined. These KIM trains include eclogitic and pyrope garnet varieties, both of which can be indicative of diamond presence in a kimberlite. North Arrow completed an airborne magnetic survey in July and August of 2013, and used the results to plan field work for the 2014 season. The company conducted till sampling and prospecting in July and August 2014, but no results have been reported to date.



Siksik peering over rock – Courtesy of AANDC

 IRON

X 850	MARY RIVER MINE
Operator/Owner	Baffinland Iron Mines Corporation
Commodity	Iron
NTS	37C/09, 37C/10, 37C/15, 37C/16, 37E/13, 37F/01, 37F/08 – 37F/10, 37F/15, 37F/16, 37G/01, 37G/02, 37G/05 – 37G/07, 37G/11, 37G/12, 37G/15, 47H/08
Land Tenure	Crown, Surface IOL, Subsurface IOL
Location	160 km south of Pond Inlet

Resource development in Nunavut reached another milestone in late September 2014, when Baffinland Iron Mines Corporation began mining operations at Mary River on Deposit No. 1. The region has been explored sporadically for its iron potential since the first iron ore discovery in 1962. The property includes five deposits of high-grade iron ore,

as well as several additional iron prospects; regional exploration is continuing in order to identify further resources. Iron mineralization on the project occurs primarily as Algoma-type banded iron formation.

In 2012, ArcelorMittal SA sold 20 per cent of its share in Baffinland to Nunavut Iron Ore Acquisition Inc., making the two parties equal 50 per cent partners in the project. Nunavut Iron Ore is a 100 per cent-owned subsidiary of Iron Ore Holdings LP and was formed as a new company registered for the sole purpose of the Mary River-related transactions.

Baffinland was issued a project certificate from NIRB in December 2012, but requested an amendment to the certificate in January 2013 that would allow them to implement a phased approach to development at the site due to difficult economic conditions. The Early Revenue Phase involved delaying construction of the proposed rail line to Steensby Inlet, and upgrading of the tote road to Milne Inlet to carry more iron ore for shipping. The company presented its revised project proposal to NIRB in June 2013.



Geologists channel sampling at Deposit No. 5, Zone C, Mary River project – Courtesy of Baffinland Iron Mines Corporation



Drilling on Deposit No. 1, Mary River project – *Courtesy of Baffinland Iron Mines Corporation*

In early September 2013, the Qikiqtani Inuit Association and Baffinland signed an Inuit Impact Benefit Agreement for the Mary River project. The agreement, which covers items such as education and training, Inuit employment, community support, and a commercial production lease, was under negotiation during the impact review and water licensing processes. The formal agreement was released in December 2013. In May 2014, Baffinland's Early Revenue Phase proposal was approved by NIRB and a new project certificate was issued. However, in late October 2014, the company requested further revisions to the terms of their project certificate due to falling demand for iron ore and a corresponding drop in iron ore prices. The requested changes included increasing the quantity of iron ore to be shipped from Milne Inlet to a maximum of 12 million metric tonnes per year, with a corresponding increase in the number of haul trucks using the tote road to 75; the extension of the shipping season to ten months of the year, which would require the use of icebreaker ships; and the further delay of the construction of the proposed Steensby Inlet railway line until 2020, with ore shipments not expected to begin at Steensby Inlet until 2024. The proposal

is currently being evaluated by the Nunavut Planning Commission for conformity with the North Baffin Regional Land Use Plan before being reviewed by NIRB.

Construction on the mine is advancing and in September 2014 the first truckloads of iron ore were brought to Milne Inlet marking a major milestone in the project's operation. Mining operations at the site will run year-round with a capacity to produce up to 4.2 metric tonnes per year. The ore mined is being stockpiled at Milne Inlet and shipping to Europe will begin during the 2015 open-water season.

The 2014 exploration field season at Mary River ran from May through late September with a budget of \$4.9 million. A total of 729 grab and 30 channel samples were collected for analysis. Six diamond drill holes were drilled and the resulting core sampled. Baffinland also ran a 544-km ground magnetic and gravity geophysical survey. All exploration activities were conducted from the Steensby Inlet camp due to the proximity of the camp to the company's exploration targets. Community consultations, environmental studies, and wildlife and archaeological surveys are ongoing.



Nickel sulphide mineralization in ultramafic complex, West Melville project – *Courtesy of AANDC*

### NICKEL-COPPER-PGE

SIO	WEST MELVILLE
Operator/Owner	Vale Canada Limited
Commodity	Nickel, Copper
NTS	47B/01, 47B/02, 47B/07
Land Tenure	Crown, Surface IOL
Location	180 km southwest of Hall Beach

In 2011, Vale Canada Limited acquired mineral claims around the Adamson River on the Melville Peninsula to explore for nickel, copper, and platinum-group elements based on a nickel discovery reported by the Geological Survey of Canada as part of a Geo-Mapping for Energy and Minerals project. The West Melville project currently consists of 22 mineral claims covering 6,987 ha. The company also holds an EA from NTI for subsurface IOL parcel HB-09.

Nickel mineralization on the property is hosted in ultramafic rocks that occur as narrow, northeast-trending units within the Archean Prince Albert greenstone belt. Assays of mineralized grab samples from the property yielded results from 0.7 to 0.9% Ni in disseminated sulfides and up to 8.0% Ni in samples with massive sulphide mineralization.

In 2011, the company began exploration on the property, including prospecting and sampling, ground and airborne geophysics, and exploratory drilling. In 2012, work included reconnaissance mapping and sampling, prospecting, and geophysical surveys.

From June to August of 2013, Vale Canada carried out a field program including drilling and ground geophysical surveys. Five drill holes were completed on two ultramafic targets for a total of 1,308 m of core. Down-hole electromagnetic (EM) surveys were done on four of the drill holes. A 21 line-km EM ground geophysical survey was also conducted. No results from the 2013 field program have been released to date, and no work was reported on the project in 2014.

The **Anik** copper-nickel project, on the Melville Peninsula, was acquired by Advanced Explorations Inc. (AEI) in 2010. AEI completed a sampling program in 2011, with the results of that program leading to plans for an airborne geophysical survey, as well as a mapping, prospecting, and sampling program. This work was deferred to a future field season and no work or further results have been reported by AEI from the Anik project since 2011.

There are two past-producing mines in the Qikiqtani region, both of which ceased production in 2002. Teck Resources Ltd.'s decommissioned **Polaris** lead-zinc mine is located on Little Cornwallis Island, northwest of the community of Resolute. The decommissioned **Nanisivik** zinc-lead-silver mine, which was operated by Breakwater Resources Ltd., is located east of the community of Arctic Bay. Post-closure environmental monitoring continues at the two sites, and water licences for both sites are in the renewal process.

Commander Resources Ltd. last completed work on the **Baffin Island Gold** project, consisting of the Bravo and Qimmiq properties, with a geophysical survey in 2011. Commander's partner, AngloGold Ashanti Ltd, withdrew from the joint venture agreement on the project in 2012. Commander retains its 100 per cent interest in the project, with further work on hold while the company searches for joint venture partners.

West Melville Metals Inc. announced in December 2014 it intends to terminate the option agreement with Roche Bay plc on the **Fraser Bay** iron project, citing challenging market conditions and the recent drop in iron ore prices. West Melville was operator of the project, which covers one mineral lease. Roche Bay plc has not announced its plans for the project.

Canadian Orebodies Inc. last reported work on the **Haig Inlet** iron ore project in 2012, when the company carried out a drill program consisting of 6,470 m drilled over 38 holes, on four separate targets (Haig West, Haig South, the Haig North Extension, and Kihl Bay). Highlights from that drilling include 33.4% Fe over 17.1 m and 26.5% Fe over 69.3 m from two separate drill holes on the Haig West target. The company released an NI 43-101 compliant resource estimate on the project (Haig North and South) in early 2012.

Advanced Explorations Inc.'s (AEI) **Roche Bay** and **Tuktu** properties are located on the east coast of the Melville Peninsula. The project consists of four mineral leases and 45 mineral claims at Roche Bay, and 16 mineral claims at Tuktu. No field work was reported on either Roche Bay or Tuktu during the 2014 season. However, the company announced in July 2014 that it would be partnering with Parkson Star Ltd. in a joint venture to further advance the project and that AEI would be transferring its ownership of Roche Bay and Tuktu to a 100 per cent-owned subsidiary, Savik Iron Mines Ltd.

NUMBER	PROJECT	OPERATOR
<b>BASE METALS</b>		
727	Anik	Advanced Explorations Inc.
728	Nanisivik Mine	Nyrstar Resources (Canada) Corporation (Breakwater Resources Ltd.)
729	Polaris Mine	Teck Resources Limited
<b>GOLD</b>		
848, 849	Baffin Island Gold (Bravo Lake – 848, Qimmiq – 849)	Commander Resources Inc.
<b>IRON</b>		
876	Fraser Bay	West Melville Metals Inc.
877	Haig Inlet	Canadian Orebodies Inc.
878, 879	Roche Bay, Tuktu	Advanced Explorations Inc.

## GLOSSARY

**base metal** – a general term applied to metals that corrode or oxidize easily, such as iron, lead, copper, or zinc.

**breccia** – a type of rock made up of angular rock or mineral fragments that have been broken apart by forces within the Earth and then cemented together. Breccias can be good hosts for mineral deposits because the spaces created after the rock is fractured provide space for mineralization to occupy.

**bulk sample** – the collection of a large amount of mineralized material from a deposit to determine its average metal or mineral content. Bulk samples are usually several hundred kilograms to several tonnes in size.

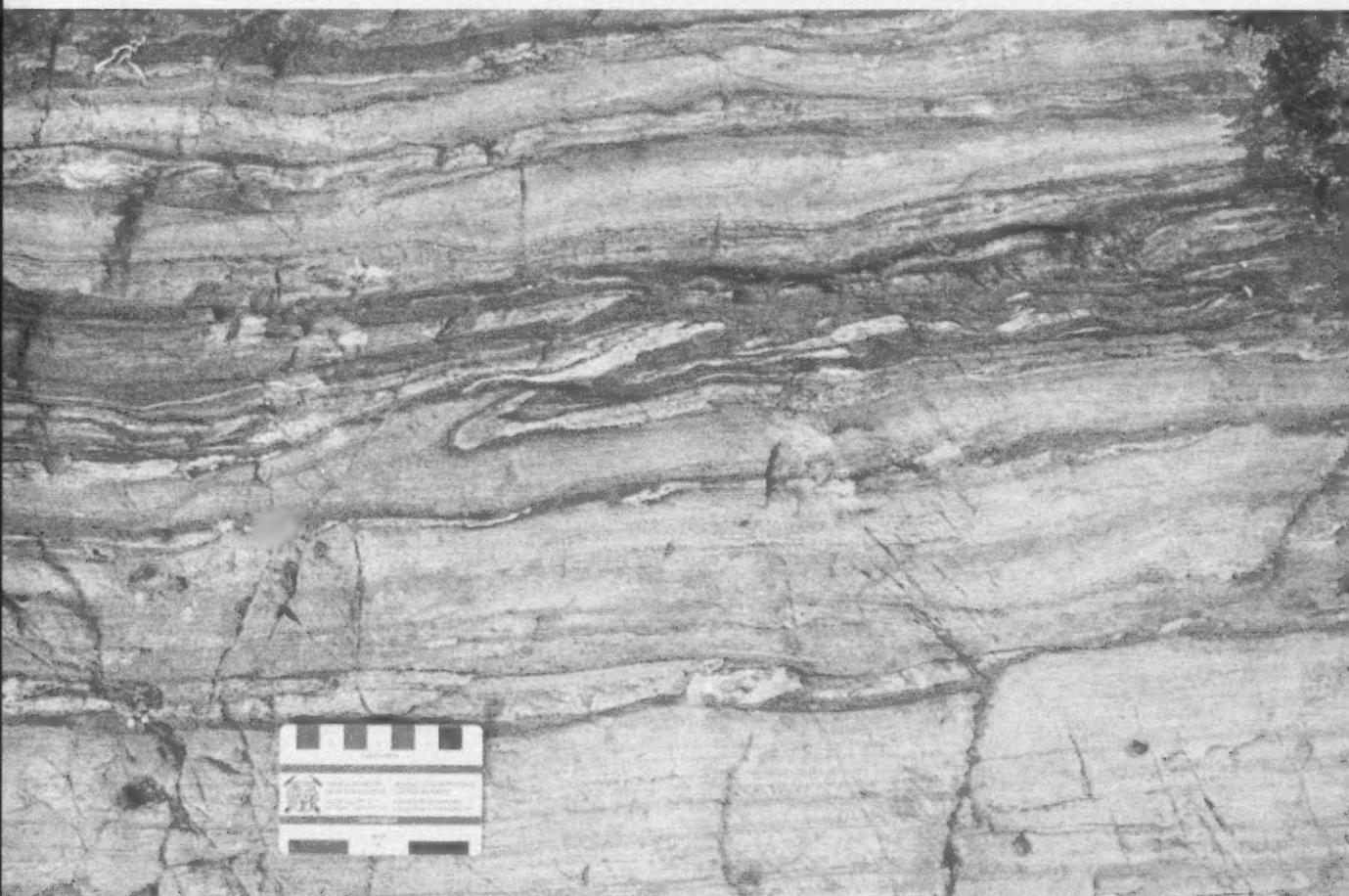
**deposit** – a natural concentration of a metal, gemstone or other mineral substance, which may be economically extracted but whose traits need a more detailed study to be classified as a resource. Also commonly referred to as a mineral deposit.

**drilling** – the operation of making holes with a drill to sample bedrock or other surface material such as glacial till or clay. Geologists examine the drill core after it is extracted in order to map rock types below the surface and to understand geological structures, with the goal of finding mineral deposits or oil and gas reserves.

**Environmental Impact Statement** – a document outlining the effects of a development project on the environment, prepared by the proponent of a project and presented to regulators, decision makers and the public.

**fee simple** – a form of private land ownership in which the owner has the right to use, control access to, and transfer the land at will. Inuit Owned lands are fee simple lands.

**geochemical survey** – the chemical analysis, done in a laboratory, of soil, rock, or water samples that have been taken from an area, to discover if metals, petroleum, or gemstones are present, by looking for abnormal



Banded iron formation interbedded with tuffaceous sediments, Angilak project – *Courtesy AANDC*

concentrations of chemical elements in the samples. Also commonly referred to as geochemical exploration.

**geophysical survey** – the collection of information associated with bedrock using sensors employed from the air or the ground. These sensors record electric, gravity, magnetic, seismic, or thermal data. This type of study is used by mineral exploration companies to detect physical properties of rocks such as magnetism, gravity or conductivity.

**grab sample** – a rock sample, collected by hand, that may contain a mineral of economic interest; it is analysed to find out if valuable minerals or metals are contained in the rock.

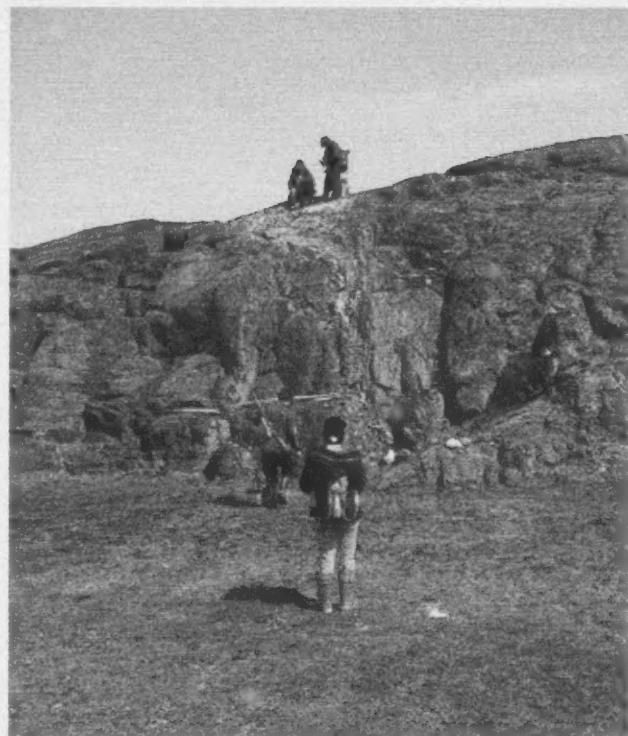
**greenstone belt** – a linear zone or “belt” of metamorphosed volcanic rocks. This type of rock commonly hosts deposits of gold or other valuable metals. The characteristic green colour comes from several different green minerals that make up the volcanic rocks. These belts can be tens to hundreds of kilometres in length and are found in several places across Nunavut.

**kimberlite** – a type of igneous rock that sometimes contains diamonds. Kimberlites can be composed of intrusive and extrusive rock. Kimberlite indicator minerals (KIM) are minerals found in glacial or other sediments that suggest the nearby presence of a kimberlite.

**mafic rock** – any igneous rock composed primarily of dark-coloured minerals, usually with a high iron and magnesium content; this term is also applied to those minerals as a group. Ultramafic rocks are rocks made up of greater than 90% mafic minerals, and some can be used as carving stone.

**platinum-group elements (PGE)** – any one of several metals including iridium, osmium, palladium, platinum, rhenium, rhodium, and ruthenium. These metals are highly resistant to tarnishing and corrosion and are used in industrial applications, as well as in jewellery.

**reserve** – a published estimate of the amount of naturally occurring metal, gemstone, or other mineral substance in a mineral deposit that can be economically extracted at the time of publication of the estimate. Classifying a deposit as a reserve indicates that a company has strong confidence in the quantity and quality of ore in that deposit. Mineral deposits must meet specific legal criteria to be classified as reserves.



GN prospecting course students examining a quartz vein near Whale Cove – *Courtesy of GN*

**resource** – a published estimate of the amount of naturally occurring metal, gemstone, or other mineral substance in a mineral deposit, which is present in an amount that could allow for economic extraction of the material in the future. Classifying a deposit as a resource indicates that a company has moderate confidence in the quantity and quality of ore in that deposit, but that more exploration is needed to consider it a reserve. Mineral deposits must meet specific legal criteria to be classified as resources.

**shear** – a type of deformation resulting from forces within the earth that cause parts of a rock mass to stretch, compress, or fracture. This deformation can form shear zones, bodies of rock with many parallel fractures that can be good hosts for hydrothermal mineral deposits.

**sulphide** – a group of minerals that all contain the element sulphur. This group includes a large number of metal-bearing minerals that are sources for metals such as iron, zinc, and copper and are commonly referred to as economic minerals. Sulphide deposits can be massive (minerals are concentrated over small areas) or disseminated (minerals are distributed over large areas).

Barge with one-tonne bags of kimberlite material for diamond valuation, Qilalugaq project – *Courtesy of North Arrow Minerals*

<b>AANDC</b>	Aboriginal Affairs and Northern Development Canada	<b>KIM</b>	kimberlite indicator minerals
<b>CNGO</b>	Canada-Nunavut Geoscience Office	<b>MPR</b>	Minerals and Petroleum Resources Division
<b>DEIS</b>	Draft Environmental Impact Statement	<b>NI 43-101</b>	National Instrument 43-101
<b>EDT</b>	Department of Economic Development and Transportation, Government of Nunavut	<b>NIRB</b>	Nunavut Impact Review Board
<b>EM</b>	electromagnetic	<b>NTI</b>	Nunavut Tunngavik Incorporated
<b>GN</b>	Government of Nunavut	<b>PGE</b>	platinum-group-elements
<b>IOL</b>	Inuit Owned Land	<b>SEDAR</b>	system for electronic document analysis and retrieval
<b>IQ</b>	Inuit Qaujimajatuqangit (Inuit traditional knowledge)	<b>VMS</b>	volcanogenic massive sulphide

**MAP NUMBER (PAGE)** Bold project number and name signifies major or advancing project.

**ADAMERA MINERALS CORP.**

- 187 Amaruk (29)
- 246 Amaruk Gold (29)
- 698 Amer Lake (47)
- 544–546 Angikuni Lake (46)
- 547 Mallery Lake (46)
- 548 Nowyak (46)

**ADVANCED EXPLORATIONS INC.**

- 727 Anik (57)
- 878 Roche Bay (57)
- 879 Tuktu (57)

**AGNICO EAGLE MINES LIMITED**

- 520 Amaruq (13,34)
- 521 Greyhound (35)
- 523 Meadowbank Mine (13,37)**
- 524 Meliadine (13,39)**
- 675 North Thelon (Agnico Eagle Option) (45)

**ANCONIA RESOURCES CORP.**

- 400 ATLAS (32)
- 549 RB (46)

**ANTOFAGASTA PLC**

- 701 Storm (50)

**AREVA RESOURCES CANADA INC.**

- 674 Kiggavik (43)**

**ASTON BAY HOLDINGS**

- 701 Storm (50)

**AURA SILVER RESOURCES INC.**

- 521 Greyhound (35)

**BAFFINLAND IRON MINES CORPORATION  
(ARCELORMITTAL S.A., IRON ORE  
HOLDINGS LP)**

- 850 Mary River (13,54)**

**CAMECO CORPORATION**

- 670 Aberdeen (41)
- 671 Turqavik (41)

**CANADIAN NORTH RESOURCES**

**AND DEVELOPMENT CORP.**

- 639 Ferguson Lake (46)**

**CANADIAN OREBODIES INC.**

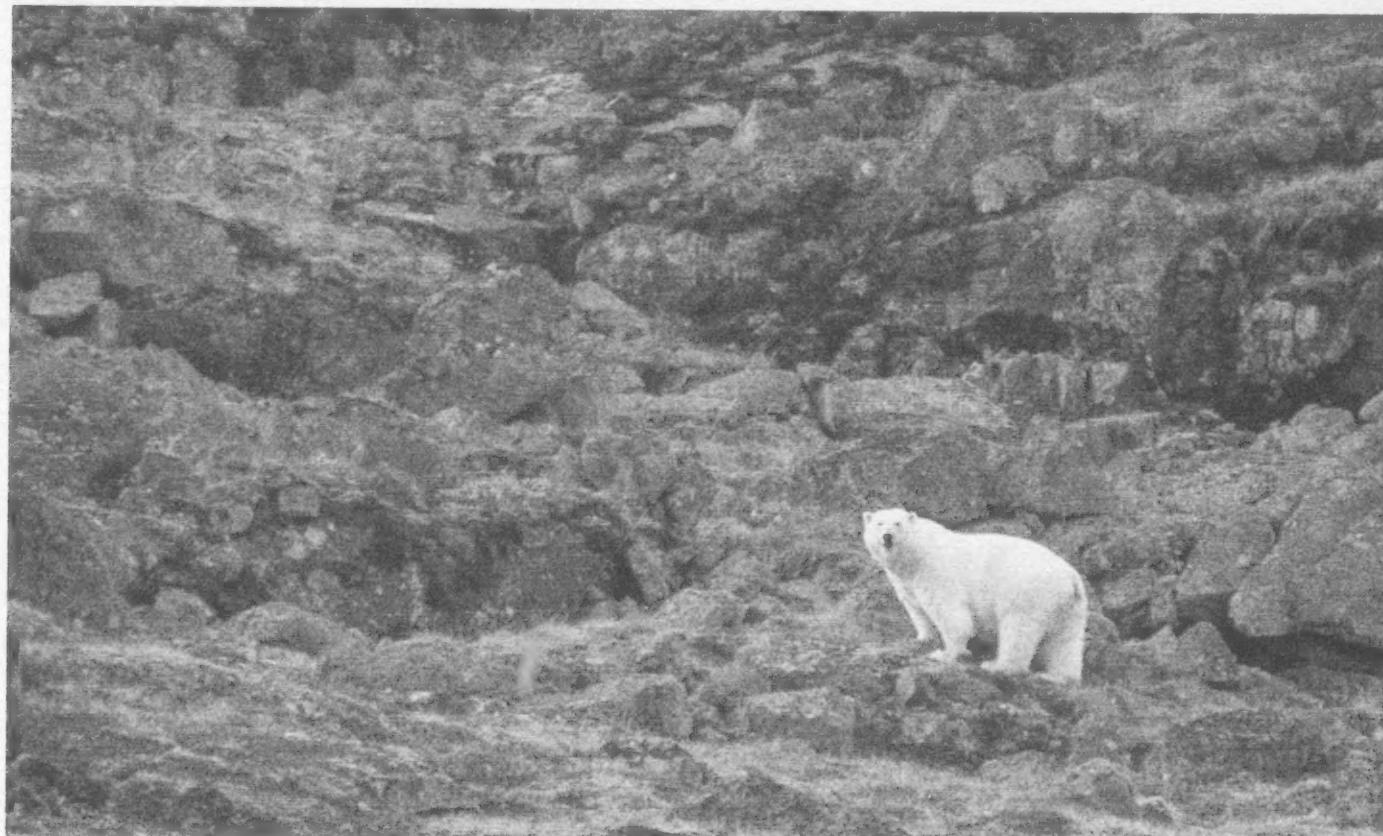
- 877 Haig Inlet (13,57)

**COMMANDER RESOURCES LTD.**

- 848, 849 Baffin Island Gold  
(Bravo Lake, Qimmiq)  
(13,57)
- 701 Storm (50)

**DAEWOO INTERNATIONAL CORPORATION**

- 674 Kiggavik (43)**



Polar bear at Jackson Sound, Qikiqtani Region – Courtesy of AANDC

## INDEX

**MAP NUMBER (PAGE)** Bold project number and name signifies major or advancing project.

DUNNEDIN VENTURES INC. 460      Kahuna (32)	KAIZEN DISCOVERY INC. 100      Coppermine River (20)	NORTH ARROW MINERALS INC. 188      Hammer (29) 461      Luxx (33) 762      Mel (53) 249      Oro (29) 462      Qilalugaq (33)
FORUM URANIUM CORP. 675-678 North Thelon (Agnico Eagle Option, Inuit Owned Lands, Kiggavik North, Kiggavik South) (13,45) 669      Nutaaq (47)	KIVALLIQ ENERGY CORPORATION 672      Angilik (13,42) 673      Baker Basin (43)	NORTH COUNTRY GOLD CORP. 222-226 Committee Bay Gold (Anuri-Raven, Four Hills-Cop, Inuk, Three Bluffs, West Plains) (24)
GLENCORE XSTRATA PLC 101      Hackett River (20) 102      Wishbone (20)	MANDALAY RESOURCES CORP. 248      Lupin Mine (29) 233      Ulu (27)	NORTHQUEST LTD. 525      Pistol Bay (40)
INUUKSHUK EXPLORATION INC. 227      Hood River (13,24)	MMG LIMITED 700      Borden (50) 129      Hood (29) <b>103, 104 Izok Corridor</b> <b>(High Lake, Izok Lake)</b> (13,21)	NUNAVUT RESOURCES CORP. 232      Itchen Lake (26)
JCU EXPLORATION (CANADA) CO. LTD. <b>674      Kiggavik (43)</b>	NEXGEN ENERGY LTD. 699      Thelon Basin (47)	NUNAVUT TUNNGAVIK INC. 672      Angilik (13,42)
		
NRSTAR RESOURCES (CANADA) CORP. (BREAKWATER RESOURCES LTD.) 728      Nanisivik (57)		
PACIFIC RIDGE EXPLORATION LTD. 673      Baker Basin (43)		
PARKSON STAR LTD. 878      Roche Bay (57) 879      Tuktu (57)		
PEREGRINE DIAMONDS LTD. 760      Chidliak (51) 463      Nanuq (34) 761      Qilaq (53)		
PROSPERITY GOLDFIELDS CORP. 522      Kiyuk (36)		
RIDGEMONT IRON ORE CORP. 579      Maguse River (46)		

Winter drilling at the George deposit – Courtesy AANDC



Rainbow and helicopter coming in for a landing, Pistol Bay project - *Courtesy of Northquest Ltd.*

**ROCHE BAY PLC**  
 878 Roche Bay (57)  
 876 Fraser Bay (57)  
 879 Tuktu (57)

**SABINA GOLD & SILVER CORP.**  
**220, 221 Back River (George Lake, Goose Lake) (22)**  
 234 Wishbone Gold (28)

**SENNEN POTASH CORP.**  
 249 Oro (29)

**SHEAR DIAMONDS LTD.**  
 189 Jericho Mine (29)

**STARFIELD RESOURCES INC.**  
 639 Ferguson Lake (46)

**STORNOWAY DIAMOND CORPORATION**  
 188 Hammer (29)  
 462 Qilalugaq (33)

**TECK RESOURCES LIMITED**  
 729 Polaris Mine (57)

**TMAC RESOURCES INC.**  
 247 Elu Belt (29)  
 228-231 Hope Bay (Boston, Chicago, Doris, Madrid) (13,25)

**TRANSITION METALS CORP.**  
 232 Itchen Lake (26)

**VALE CANADA LIMITED**  
 910 West Melville (56)

**WEST MELVILLE METALS INC.**  
 876 Fraser Bay (57)

**WPC RESOURCES INC.**  
 227 Hood River (13,24)  
 233 Ulu (27)

# DISCOVER

THE GEOSCIENCE OF NUNAVUT THROUGH THREE INTERACTIVE TOOLS:

## EXPLORATION OVERVIEW

THE ONLINE AND E-BOOK VERSIONS OF THIS ANNUAL PUBLICATION  
OF EXPLORATION ACTIVITIES THROUGHOUT NUNAVUT

## REFERENCES

A DOWNLOADABLE LIBRARY OF SCIENTIFIC PUBLICATIONS, MAPS AND DATA

## SHOWINGS

FOR BROWSING THE MINERAL OCCURRENCES DATABASE  
WITH LINKS TO SUPPORTING REFERENCES

**[www.NunavutGeoscience.ca](http://www.NunavutGeoscience.ca)**

THE MOST AUTHORITATIVE STOP FOR NUNAVUT GEOSCIENCE INFORMATION.

